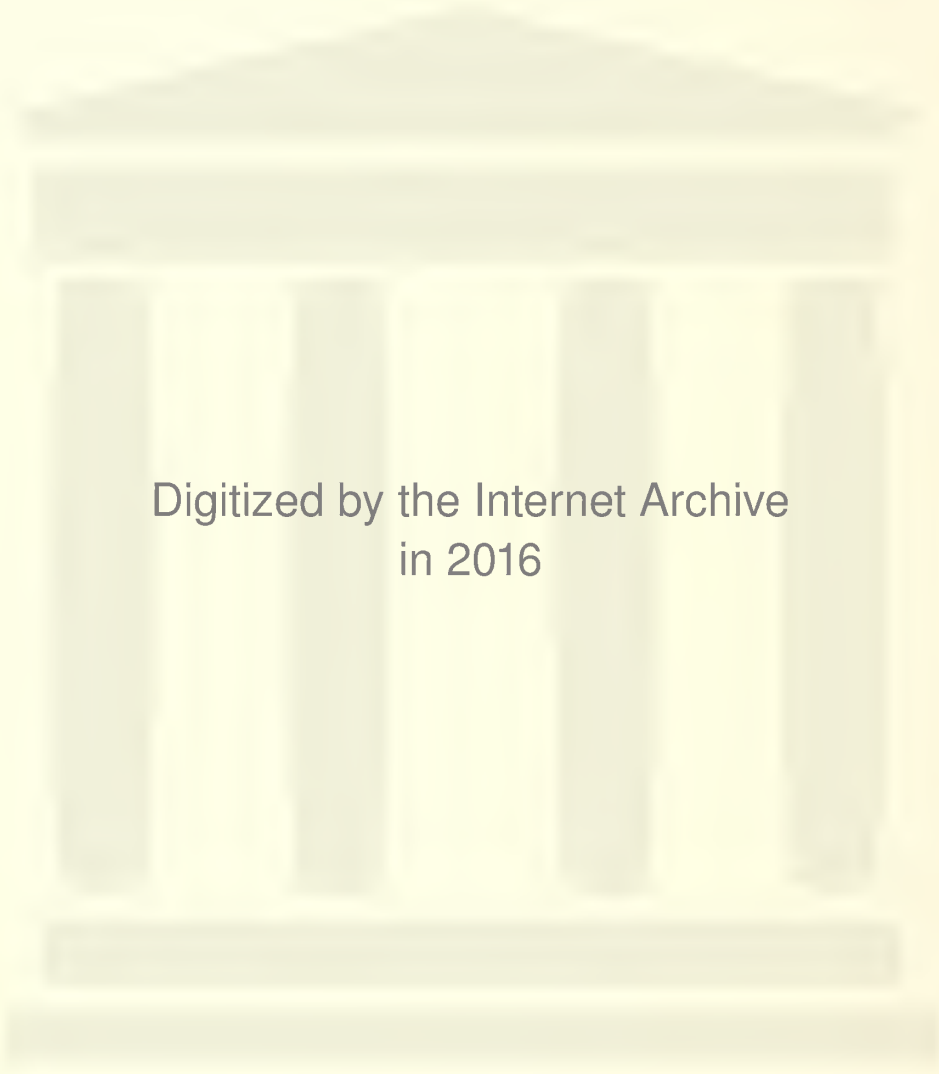

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of the

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

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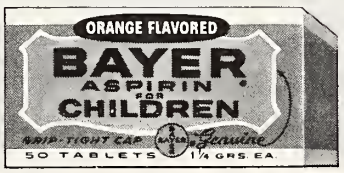
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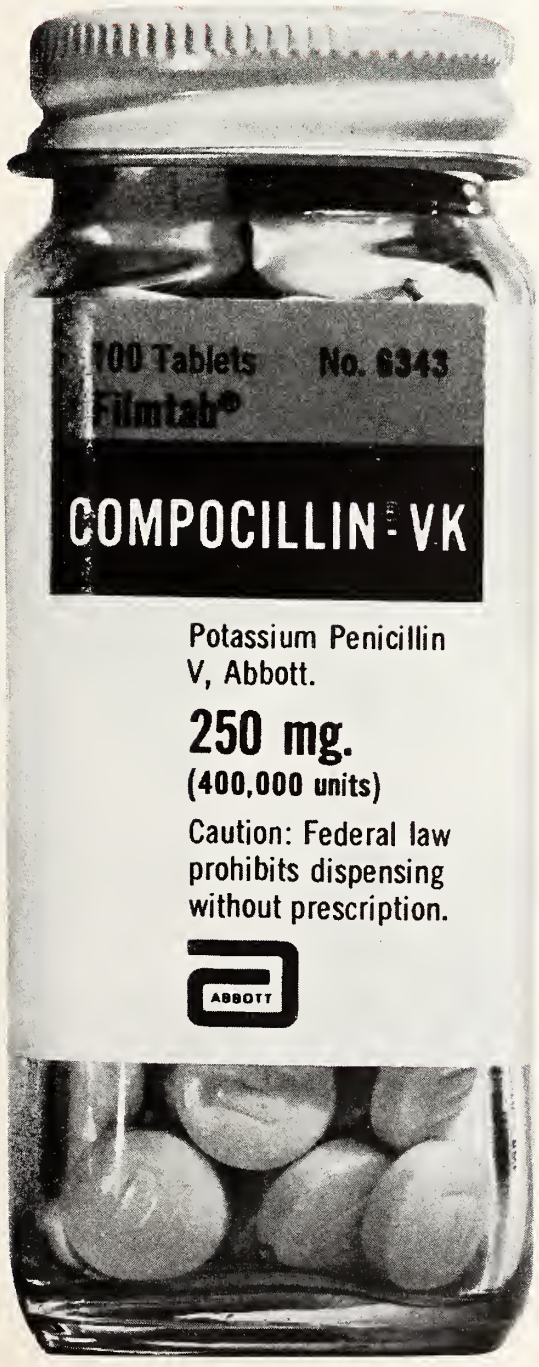
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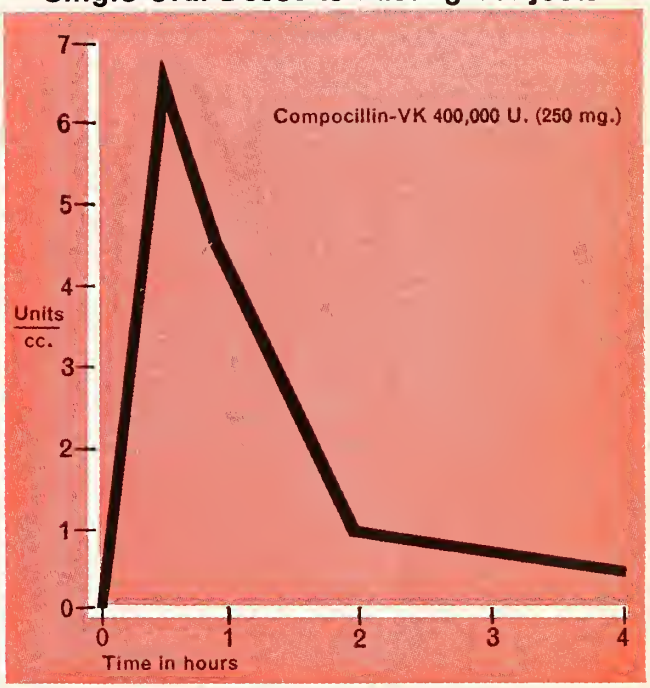
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. . . where your primary concern is high peak serum concentrations, you can prescribe Compocillin-VK at *full therapeutic dosage* and get the maximum antibacterial activity possible with an oral penicillin. The chart above shows the rapid peak blood levels obtained with 400,000 units (250 mg.) of Compocillin-VK. Actually, these peaks occur faster—and are higher—than those obtained with intramuscular penicillin G. Indeed, Compocillin-VK has been used in cases previously reserved for parenteral treatment. The safety advantage (oral vs. injectable) goes without saying.

*Chart data from two separate studies completed by the Microbiologic and Medical Departments of Abbott Laboratories.

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(the dual-action anti-asthmatic tablet)

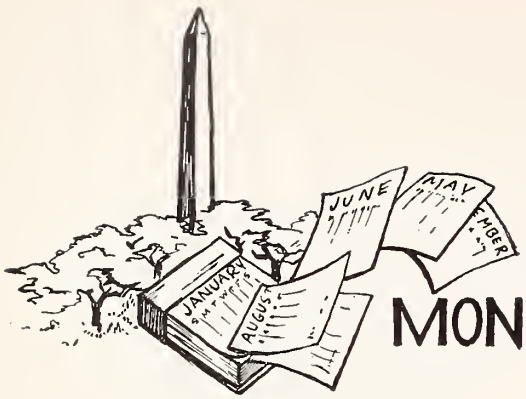
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One NEPHENALIN tablet provides: *air in a hurry*—through sublingual isoproterenol HCl, 10 mg. *air for hours*—through theophylline, 2 gr.; ephedrine, 3/8 gr.; phenobarbital, 1/8 gr.

Dosage: Hold one NEPHENALIN tablet under the tongue for five minutes to abort the asthmatic attack promptly. Then swallow the tablet core for four full hours' protection against further attack. Only one tablet should be taken every four hours. No more than five tablets in 24 hours.

Supplied: Bottles of 50 tablets. For children: NEPHENALIN Pediatric, bottles of 50 tablets.

Caution: Do not administer NEPHENALIN with epinephrine. The two medications may be alternated at 4-hour intervals. NEPHENALIN should be administered with caution to patients with hyperthyroidism, acute coronary disease, cardiac asthma, limited cardiac reserve, acute myocardial damage, and to those hypersensitive to sympathomimetic amines. Phenobarbital may be habit forming. THOS. LEEMING & CO., INC., New York 17, N.Y.



This summary of what is happening in Washington is prepared by A.M.A.'s Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D.C.—Health, Education and Welfare Secretary Anthony J. Celebrezze expressed the belief that state and local governments have the primary responsibility for welfare programs and other public services.

He told a National Press Club luncheon:

"The federal government's responsibility should be limited to those matters which are of primary national interest and cannot be effectively carried on through individual or local community effort."

He also said that his basic welfare program policy would be to "help people help themselves."

But Celebrezze does not follow this philosophy of government to the point of weakening his support of the Kennedy Administration's Social Security hospitalization legislation. The Administration has said that it will push again for passage of such legislation in the new Congress convening January 9. But Celebrezze conceded it would be difficult to secure House approval.

The Administration gave no indication in pre-session talk whether the big push for the legislation would be made in this year or in 1964.

AMA REAFFIRMS HEALTH CARE FOR AGED STAND

The House of Delegates of the American Medical Association, at its recent 16th Clinical Meeting in Los Angeles, reaffirmed its opposition to the Social Security approach in providing health care for the aged. The AMA also reaffirmed its support of the Kerr-Mills program.

Dr. George M. Fister, AMA president, said the AMA "will not compromise on the fundamental principles" in the controversy. Noting that the medical profession again faces a hard fight on the issue in Congress, Dr. Fister expressed confidence that "we can again win."

A spokesman for the drug industry warned at a Washington, D.C. meeting of government and industry officials and consumers that enactment of the Administration medical care plan would open the way for the federal government "to extend its controls in all health areas, including drugs, ostensibly to assist patients economically to obtain these services." The spokesman, Francis C. Brown, president of Schering Corp., added:

"Those who say it can't happen here may be deluding themselves. It can and it will if we permit it."

Continued

Trocinate®

Brand of Thiphenamil HCl.

FOR DIVERTICULITIS, MUCUS COLITIS,

IRRITATIVE DIARRHEA, IRRITATIVE URETERITIS,

BLADDER SPASM

Trocinate is a musculotropic antispasmodic with no appreciable anticholinergic action. It relieves spasms of the lower bowel and genito-urinary tract by direct action on the contractile mechanism of smooth muscles. The absence of any appreciable action on the autonomic nervous system eliminates the usual side-effects. It may be safely used in glaucoma. Each tablet contains 100 mgs. Trocinate HCl.

USUAL DOSAGE: 2 tablets, 4 times a day. Maintenance dosage is frequently lower.

Dispensed in bottles of 40 and 250 tablets.

WM. P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA

Manufacturers of ethical pharmaceuticals since 1856

Continued

NUMBER OF CONGRESS PHYSICIANS DOWN

The new Congress has only four physician members as compared to seven in the 1961-62 session.

Sen. Ernest Gruening (D.,Alaska) and Reps. Durward Hall (R.,Mo.) and Thomas Morgan (D.,Pa.) were reelected. Dr. James D. Weaver (R.,Pa.) captured a House seat in his first political race.

Reps. Walter Judd (R.,Minn.) and Ivor Fenton (R.,Pa.) were defeated in contests where redistricting was a major factor.

Rep. Dale Alford (D.,Ark.) gave up his House seat and ran unsuccessfully for governor of Arkansas. Rep. Edwin Durno (R.,Ore.) lost in a bid to switch from the House to the Senate.

The overall election results added four Democrats in the Senate, but appointment of a Republican to succeed a deceased Democrat cut the net gain to three. The Republicans increased their House strength by two members.

The Senate lineup now is 67 Democrats to 33 Republicans. The new House has 259 Democrats and 176 Republicans.

HOSPITALS MAY BE USED AS FALLOUT SHELTERS

The American Hospital Association and the Defense Department agreed on a program to use hospitals as public fallout shelters in event of nuclear attack.

In a joint statement, the AHA and the Defense Department said that "in these times every hospital has the responsibility to take practical and sensible measures to minimize loss of life resulting from radioactive fallout" should there be a nuclear attack.

It was estimated about 6,200 U.S. hospitals presently could provide fallout protection for more than three million persons.

The program calls for the Defense Department to provide the cooperating hospitals with emergency supplies of medical material, food and other emergency items to be stockpiled in basements and other places judged "safe" from fallout.

If Congress approves the Administration's request for a national shelter program, federal funds will be available to hospitals for additional construction that would be suitable for operating rooms, storage space, automobile parking and other similar purposes when not needed for fallout shelters.

HEALTH CARE COSTLY

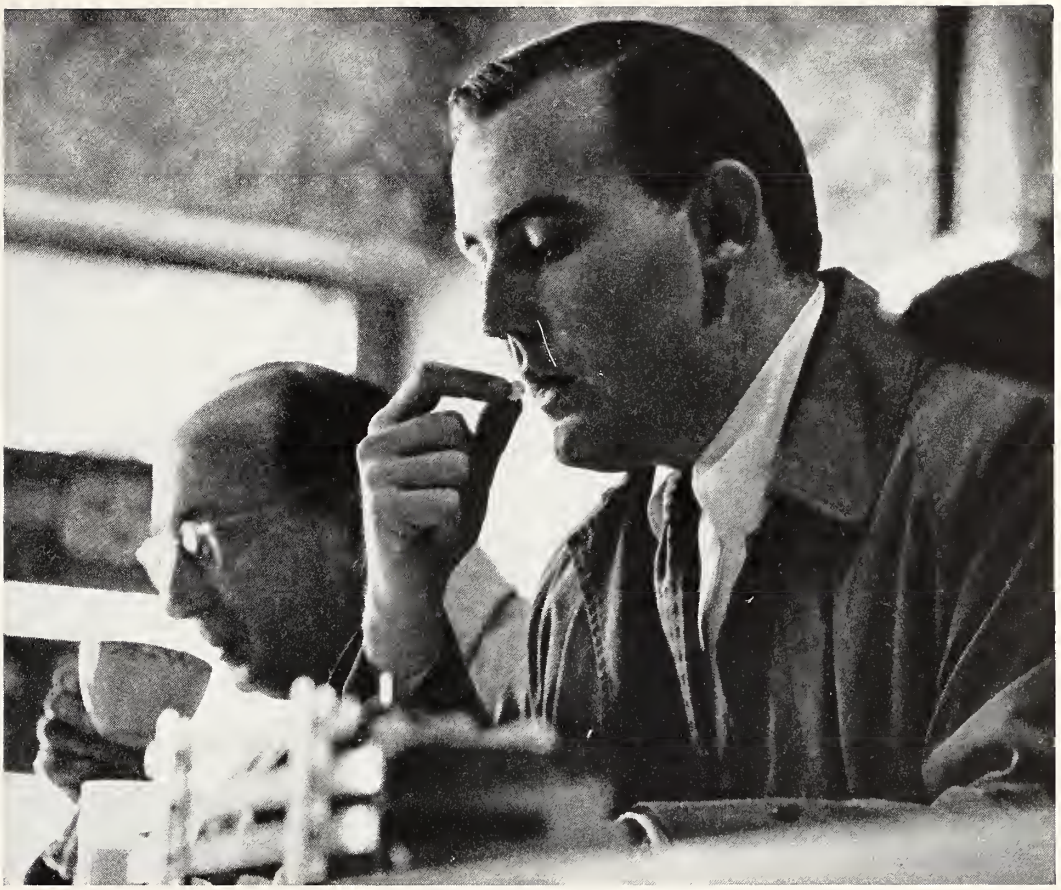
American consumers spent a new high of $21.1 billion for health care in 1961, according to the Social Security Administration.

The Federal Agency reported that the total private outlay for health care, which included $14.4 billion in direct out-of-pocket expenditures and $6.7 billion paid for health insurance, exceeded by $1.3 billion the total spent in 1960.

The 1961 consumer expenditure for health care amounted to $116.60 for each American. Direct expenditures per capita were $79.76 and payments for health insurance amounted to $36.84 per capita.

These sums applied only to private expenditures for health care

Continued



For peptic ulcer gastric hyperacidity and gastritis...

In year-long study on peptic-ulcer patients

New Creamalin®
Antacid Tablets

*"...faster in onset of action...and for a longer period"**

"Clinical studies in 85 patients with duodenal ulcer ...confirmed the superiority of the new preparation [new Creamalin] over standard aluminum hydroxide preparations, in that prompt relief was achieved and maintained throughout the period of observation."*

Patients were followed for about one year.

New Creamalin promotes ulcer healing, permits less frequent feedings because it is so long-acting. Heartburn and epigastric distress were "...easily and adequately controlled...."* New Creamalin has the therapeutic advantage of a liquid antacid with the convenience of a palatable tablet. *It does not cause constipation.*

Each new Creamalin tablet contains 320 mg. of specially processed highly reactive dried aluminum gel (stabilized with hexitol) with 75 mg. of magnesium hydroxide. Minute particles offer a vastly increased surface area.

Dosage: Gastric hyperacidity—from 2 to 4 tablets as needed. Peptic ulcer or gastritis—from 2 to 4 tablets every two to four hours. *How Supplied:* Bottles of 50, 100, 200 and 1000.

Now also available—New Creamalin Improved Formula Liquid. Pleasant mint flavor—creamy pink color. Stabilized reactive aluminum and magnesium hydroxide gel (1 teaspoon equals 1 tablet). Bottles of 8 and 16 fl. oz.

Creamalin, trademark reg. U.S. Pat. Off.

*Schwartz, I. R.:
Current Therap. Res. 3:29, Feb., 1961.

Winthrop LABORATORIES New York 18, N. Y.

Continued

and did not include government outlays or health care provided through private organizations to the needy.

A breakdown by category of expenditures showed how the consumer's health care dollar in 1961 was divided:—hospital care, 27.6 cents; physicians' services, 27.6 cents; drugs, 19 cents; dental care, 9.8 cents; eyeglasses and appliances, 6 cents; nursing and other professional care, 4 cents; nursing-home care, 1.4 cents. The remaining 4.6 cents represented the net cost of health insurance.

Of the total $6.7 billion expenditure for health insurance premiums, 45.4% was paid to Blue Cross-Blue Shield plans, 38.1% to insurance companies for group coverage, 9.4% to insurance companies for individual policies, and 7.1% to independent health insurance plans.

It was estimated that insurance benefits paid 28.3% of the consumer's total 1961 health care bill, exclusive of the cost of insurance. Insurance met 66% of all charges for hospital care, 30% of all charges for physicians' services, and 1.5% of the cost of all other items, including dental care, nursing service, drugs, and nursing-home care. ◄

About Our Cover

Another year has started and another volume of *The Journal*, Volume 56 to be exact . . . our hope and goal for 1963 is that all the members will find scientific papers, articles and information in the forthcoming twelve issues to interest them and also to stimulate their active participation in the affairs of our state Association.

Special issues devoted to certain subjects will appear again this year; the heart issue in February, Roster and Yearbook in June, the general practitioners issue in August and, of course, the convention issue carrying the program and details of the annual October meeting will appear in September.

Our cover picture this month was taken by Mr. James A. Waggener, from the train whilst speeding en route to the AMA Clinical Meeting in Los Angeles held last November. The contrast between the sunlit desert scene in Colorado and the cold and snow of our Hoosier winter was so irresistible that we felt it would bring a lift to everybodies' spirits.

The hectic holiday rush and festivities over, our spirits do tend to sink in the anticlimax that comes with the end of the Christmas season on Twelfth Night and we are left with nothing to look forward to in the next few months but more snow, more sub-zero temperatures and the Internal Revenue's annual greeting!—M.E.R.

RELIEVE THE COLD SUPPRESS THE COUGH WITH NEW

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TABLETS

ANTITUSSIVE ▪ DECONGESTANT ▪ ANALGESIC

Each tablet contains:

Codeine Phosphate*	15 mg.
'Sudafed'® brand Pseudoephedrine Hydrochloride	20 mg.
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Acetophenetidin	150 mg.
Aspirin (Acetylsalicylic Acid)	200 mg.
Caffeine	30 mg.

*Warning—may be habit forming.

Complete literature available on request.

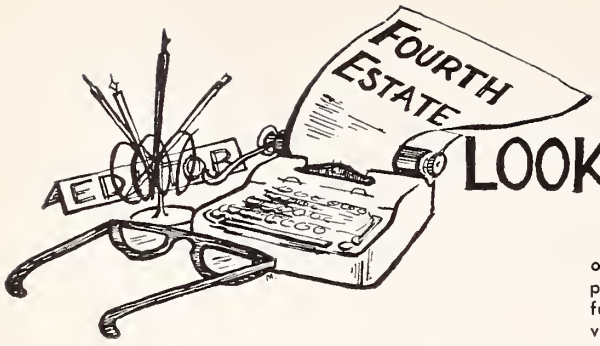
Also available without codeine as

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TABLETS



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LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentation of opinions which appear on the editorial pages of the public press, and which are of interest to the medical profession. Its function is to review comments which may be favorable or unfavorable to medicine. Members are invited to submit editorial clippings for this column.

Acorns Start Oak Trees

Proposed drug law changes stemming from the Kefauver subcommittee hearings have many broad implications for other lines of business. One of these is in the labeling of goods.

It is proposed that the Department of Health, Education and Welfare be empowered to designate "standard names" for drugs, and to require that on the package label the officially designated standard name be given a position of precedence over the manufacturer's trademark or brand name for the drug, and be in type at least as big as the trademark or brand name.

The objective, of course, is to downgrade the identification of products with their manufacturers, so that all drugs would be known and prescribed by common names. An example would be the present use of the name "aspirin."

If this is to be established as a desirable objective, to be achieved by federal action, then certainly it would have application in lines of products other than drugs. In labeling of food packages, for instance, it would follow quite logically that the government might decree that the words, "vegetable soup," must appear on a can above and in type size equal to the brand name. Or "gelatin powder" might be specified at the top of the box instead of the maker's name for the product. What might be done with breakfast foods we can't imagine.

If the precedent is once established, what are the limits, if any, to which this kind of regulation might be carried? Perhaps no one would think it necessary to put the word "automobile" across the hood and rear deck, above and in the same size letters as the name of the make. But where might the line be drawn?

As has been the case with proposed patent law changes and others, this scheme is advanced for drugs only under the argument that drugs are special. So they are. But so also are most other products. Almost every kind of product has its own special claim to consideration as essential to the health, the safety, the cultural advancement or the well-being of people. Grounds for special regulation of virtually any of them could be found. And the same general objectives of assuring supply, or holding down prices, or controlling quality, could readily be applied.

It is very much to the point to consider how precedents established for one industry might be spread to others. Whenever government enters a new field of regulation, the possibilities are unending.—*Indianapolis Star,* Oct. 3, 1962.

Don't Make Me Walk

The careless Hoosier driver who tends to violate traffic laws will find himself accumulating penalty points swiftly in the future. The risk of losing a license to operate an automobile will be much greater than in the past.

Governor Matthew E. Welsh and C. Allen Nutting, state motor vehicle commissioner, joined forces to make changes in the Indiana point system. The avowed aim is to reduce traffic accidents, and fatalities. The governor also has urged judicial officers in the state to co-operate with police in strict enforcement of local and state laws.

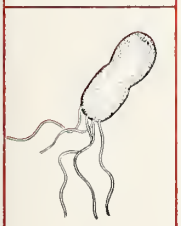
Continued on page 22

to lobar pneumonia in Indiana

there is a world of experience behind BRAND OF OXYTETRACYCLINE **Terramycin®**



Whether treating Oroya fever or a host of other infections, physicians throughout the world continue to rely on TERRAMYCIN for its outstanding safety, effectiveness and excellent tolerability. Not a single case of phototoxic reaction, blood dyscrasia or neurologic disturbance directly attributable to TERRAMYCIN has been reported in more than 3,000 clinical papers in the last 12 years. *In your practice, the next infection you see will very likely be "Terra-responsive."*



Oroya fever (Carrión's disease), prevalent only in certain valleys of the Andes, is characterized by a rapidly evolving, febrile pernicious anemia. The infecting organism is *Bartonella bacilliformis,* a gram-negative, flagellated organism, transmitted by night bites of the phlebotomus, or sand fly. The organism is unmistakably identifiable in blood films—no other human pathogen even slightly resembles it. The mortality rate of untreated Oroya fever can be as high as 40 per cent (in all probability, this was the disease which decimated Pizarro's army in the 16th century). Treatment with Terramycin produces dramatic reduction of fever and a stabilized blood count in 48 hours or less.

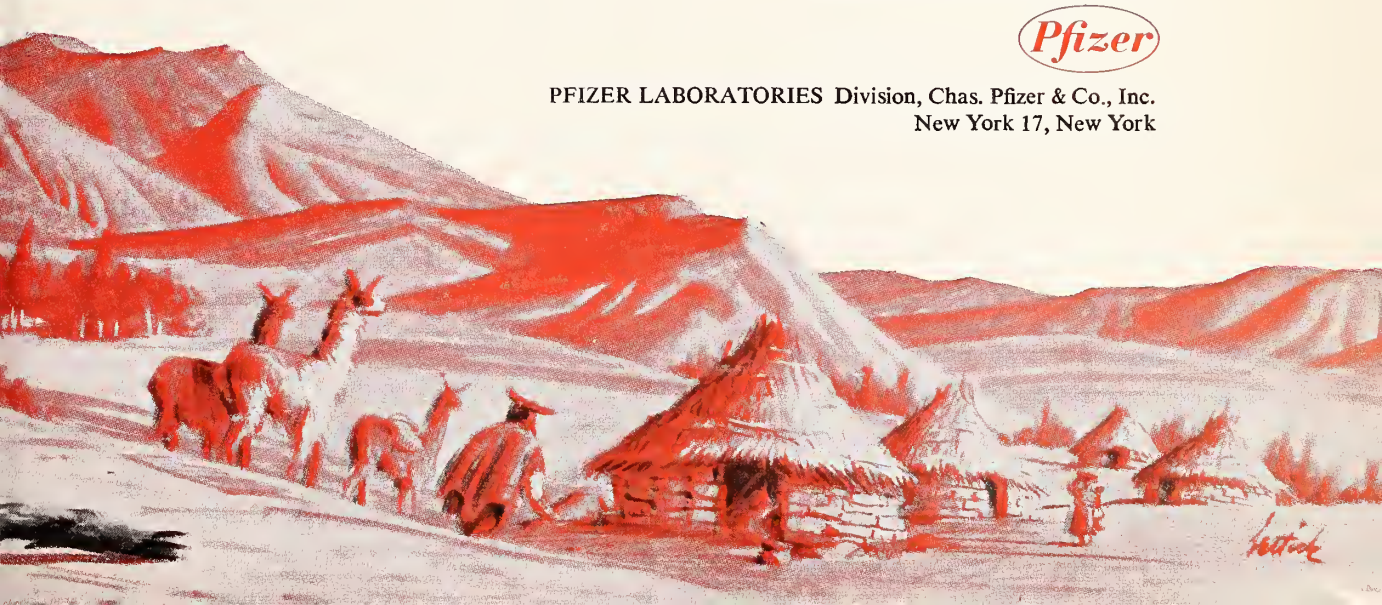


IN BRIEF The dependability of Terramycin in daily practice is based on its broad range of antimicrobial effectiveness, excellent toleration, and low toxicity. As with other broad-spectrum antibiotics, overgrowth of nonsusceptible organisms may develop. If this occurs, discontinue the medication and institute appropriate specific therapy as indicated by susceptibility testing. Glossitis and allergic reactions to Terramycin are rare. For complete information on Terramycin dosage, administration, and precautions, consult package insert before using. *More detailed professional information available on request.*

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FOURTH ESTATE

Continued

It is a curious fact that the average American views the prospect of being forced to walk with a great deal more horror than the prospect of death in an automobile accident. Simply putting a Hoosier on his feet is one of the worst forms of punishment yet devised by public officials. Walking is now generally considered to be the fate worse than death, by both sexes.

Changing the penalty point system may not have an immediate effect, but it certainly will add weight to the current safety program. Strict, even rigid, enforcement of traffic laws will also help.

The governor and the commissioner should be commended for their efforts.—*Indianapolis Star*, Oct. 3, 1962.

Drug Control Needs Care

The Senate's swift passage of a new drug control bill, without a dissenting vote, indicates more of eagerness to capitalize on public hysteria than of sober wrestling with a problem. This is further evidenced by the fact that the tougher restrictions in the bill are items which had been knocked out of it before the thalidomide uproar.

The tightening of government requirements for quality control in testing and manufacture of drugs may generally be good. It will be of little use to tighten the laws, however, unless the Food and Drug Administration inspection and evaluation machinery is expanded and strengthened. Yet some of the Senate bill's provisions will pile additional responsibilities and tasks on the already overtaxed machinery of the FDA.

The bill would empower the FDA to pass judgment on the animal testing of a new drug before testing with humans would be permitted to start. It would require a positive authorization from FDA before a new drug could be placed on the market after testing, whereas present law provides automatic licensing at a specified time after application is filed unless the FDA issues a delay or rejection order. Both of these provisions would increase the work of FDA, and both would provide the potential of interminable delays in the development and offering of new drugs simply through slowness of action in the FDA.

Another provision would authorize the FDA arbitrarily and immediately to remove from the market any drug or preparation it considers potentially dangerous to the public health. Reckless use of this power could create chaos in medicine supply.

To the Senate's credit, it rejected a new attempt to include in the bill a provision to destroy most of the licensing effectiveness of drug patents. That move, aimed at prices, would work directly opposite to the purpose of achieving closer control and responsibility.

The House now has a heavy burden. If it is to pass a drug bill which will be sound, which will improve the situation while avoiding the pitfalls of over-regulation and excessive Federal powers, it must deal studiously and painstakingly with the position adopted by the Senate. There is not really any emergency situation which calls imperatively for action in the present session, in which time is running very short. The House should resolutely insist that action be taken only with adequate care, study and deliberation. Or else it should leave the matter for another session when there will be more time and cooler thinking.—*Indianapolis Star*, August 27, 1962.

Bruce Was Right

The criticism of United States policies in the Congo by Rep. Donald C. Bruce of Indianapolis has been validated and vindicated.

An Indianapolis doctor with no political interest in Africa, other than a desire to help the people there, has just returned from Katanga. He is one of six local physicians taking part in a program started by Bishop Richard C. Raines, head of the Indiana Methodist Church. Dr. Herbert L. Sedam has seen at first-hand what this country, through the United Nations, has done in the Congo.

The flat opinion of Dr. Sedam is that the U.N. is a failure in Africa. He also argues that spending more American tax money to support any part of the U.N. program in the Congo is "ridiculous."

Continued



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This is exactly what Rep. Bruce has been saying for months in Congress.

Rep. Bruce is a Republican who has not hesitated to criticize the New Frontier. Some of his opponents have attempted to dub him the "Congressman for Katanga."

Rep. Bruce can wear the title proudly. He has direct, personal support for his position in the observations and words of a Hoosier doctor who lives in Indianapolis. Instead of being a term of derision, Bruce's title is a reason for pride.

Dr. Sedam said that the U.N. has contributed nothing worthwhile to the Congo and has only created confusion. The physician said the U.N. has indulged in deliberately misinforming the tribal people who live in the Congo. The U.N. has worked against Moise Tshombe, the only African leader who wants peace, progress and improvement for the people.

These are sentiments almost precisely parallel to those expressed by Rep. Bruce on the floor of Congress, in Indianapolis and in the campaign. Perhaps the one thing that the New Frontiersmen in Washington and in Indiana can neither forgive nor forget is the fact that Bruce is so often right.

Rep. Bruce was acting in the best interests of the Hoosiers who elected him when he objected to U.S.-U.N. policy in the Congo. He sought merely to conserve Indiana tax money by opposing the expenditure of more American dollars in the Congo. By supporting Moise Tshombe, he backed a friend of Americans.

Bruce's action on the Congo is supported by facts. His opponents have to rely on half-truths and distortions.

Hoosiers in Marion County will have the opportunity to return Bruce to Congress for a second term. We hope they do.—*Indianapolis Star,* Oct. 18, 1962.

In Case You're Unconvinced

Next to good sense, driving skill, and sobriety, the seat belt probably is the finest motoring safety accessory ever devised. The problem is to convince people of that fact.

Safety organizations, public service advertising groups and newspapers have done a lot to promote the message—enough in fact to help persuade owners of 4.5 million cars to equip their vehicles with belts. Significantly, more than 2 million of the belt sets were sold in the last year.

So the message is getting across, but much too slowly. The 4.5 million figure represents only 7% of the cars on the roads nationally, and 9% of those registered in Indiana. Moreover, nearly half of the persons driving cars with belts tend not to use them.

So a major convincing job still lies ahead.

The Indianapolis Police Department has initiated a program which will be of considerable value. Within a few days, all traffic accident reports will include information as to whether the vehicles involved are equipped with belts and whether they were being used at the time of the accidents. The Marion County sheriff's office and the state police have indicated they will co-operate fully in the educational campaign.

Statistics carefully maintained for nearly a decade have established that the universal employment of good seat belts would lower auto deaths and serious injuries by 35% to 70%, the disparity between 35% and 70% being largely due to the definition of "serious."

The National Safety Council insists arbitrarily that belts would save 10,000 lives a year. This is based upon responsible, grisly studies of victims by bone surgeons and police.

Hence, anything that can further promote the use of belts is to the good. The police reporting service will be of great benefit. Newspaper readers then will be able to see, day in and day out, just what value belts have in particular accidents.

Did you know that your chances of being killed in a car accident, even a minor one, are five times greater if you are thrown from the vehicle than if you remain inside?

A good belt will keep you inside.—*Indianapolis News,* Dec. 5, 1962. ◄

The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 56 — January 1963 — Number 1

Clinical Cytogenetics*

CATHERINE GARDELLA PALMER, Ph.D.†
Indianapolis

INDIVIDUALS BEARING unusual numbers of autosomes or sex chromosomes may arise from union of a gamete carrying the product of meiotic non-disjunction. There are several factors bringing about non-disjunction in meiosis. Normally the separation of pairs of chromosomes is regulated, to some extent, by the production of cross-overs which hold the pairs in position at the metaphase plate and which are visible as *chiasmata*—points of attachment of chromatids. A lack of pairing or complete lack of crossing-over, or abnormal pairing of chromosomes may result in abnormalities of the normally random and equal segregation at meiotic division. Since X and Y chromosomes have very small pairing segments (and there is doubt whether much crossing-over occurs between these chromosomes) often they are separated and seen as individual bodies during meiosis. Therefore, the position of X and Y at the metaphase plate as separate units may result in precocious disjunction, both proceeding to the same pole rather than to opposite poles of the spindle.

Another factor in the etiology of the non-disjunction is the presence of a homologous region in another chromosome (see translocations, insertions below) producing abnormalities in pairing and often resulting in abnormal distribution at the first meiotic metaphase.

Mitotic Non-Disjunction

Non-disjunction may occur in the cleavage divisions of the embryo. The individual might then have some cells with 45, some cells with 46 and some with 47 chromosomes and, depending upon the stage of the embryo when mis-division occurs, the products might or might not be distributed to different tissues. Such individuals are termed mosaics. Increasing numbers of human chromosomal mosaics are being described. A number of the sex chromosome mosaics are listed in Table 2.‡ (Secondary non-disjunction in individuals with abnormal chromosome constitutions appears to occur frequently and may result in mosaic individuals.) Interestingly enough, recent studies on sex chromatin of such mosaics have shown that sex chromatin type is determined early in embryonic development

* Part 2, Continued from December.

† From the department of Medicine, Medical Genetics Program and Cancer Research, Indiana University Medical Center.

‡ Table 2 appeared in Part I of this article, Dec., 1962, p. 1758.

and subsequent non-disjunction does not alter this characteristic.[10]

An increase in non-disjunction appears to occur with increasing age. This occurs both in mitotic and meiotic divisions. It has been found that cultures of leukocytes from peripheral blood of older individuals show a greater tendency to aneuploidy than those from young individuals.[4] Meiotic non-disjunction similarly increases with age. This may be observed from the increased incidence of mongolism (trisomic-type) in older mothers.[7]

Translocation Causes Mongoloids

A second group of mongoloid patients, these not bearing 47 chromosomes, may appear in progeny of young mothers (less than age 25) and may be suspected in families having a number of mongoloid individuals. These mongoloids do not carry a complete extra G chromosome, merely an extra segment of "21." They result from a *translocation* of a segment of chromosome 21 to another chromosome. Such translocations, having occurred, may be maternally or paternally transmitted.

The process of translocation arises from abnormal breakage of two chromosomes followed by abnormal reunions, thereby resulting in new morphological types of chromosomes (Figure 7). The cell, therefore, carries one normal and one abnormal chromosome of each translocated pair. While the individual bearing a translocation may be phenotypically normal (clinically normal), the gametes produced will be of several kinds:

a. Bearing both normal chromosomes. (1)

b. Bearing one normal and one re-arranged chromosome (3) (lacking a small segment of a chromosome).

c. Bearing one normal and one re-arranged chromosome (4) (lacking a large segment of a chromosome).

d. Bearing both re-arranged chromosomes and, therefore, (2) having a complete genome.

The gametes deficient in segments may not be viable or, if fertilization occurs, the

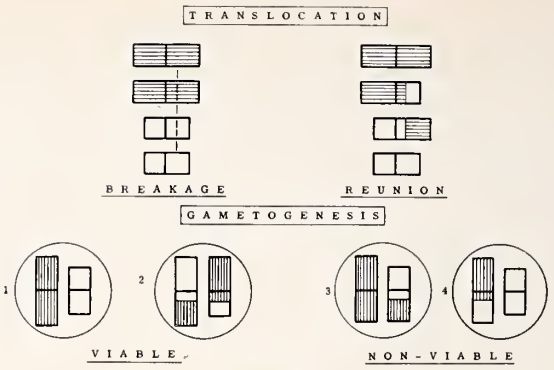


FIGURE 7

THE PROCESS of translocation and its effects at the production of egg and sperm.

fetus may be abnormal or nonviable. In general, loss of large segments of genetic material is thought to be lethal. Viable translocation-bearing individuals (the parent in Figure 7 or the individual resulting from fertilization of gamete 2 and a normal gamete) may show a reduction in fertility or increased incidence of abortions or stillbirths.

Other types of chromosomal rearrangements may occur. A number of these have been found in man. A *deletion* occurs when a segment of a chromosome is lost. Deletion of a segment of chromosome 21 has been found in chronic myeloid leukemia. Here the bone marrow and blood cells bear the 21 or "Philadelphia" chromosome showing the deletion, but the skin and other tissues, including the gametes, are completely normal. It is of considerable interest whether the deletion produced the disease or whether, as in other tumors, it is a manifestation of tumor progression.

An *insertion* of a segment of one chromosome into another chromosome may occur. This type of translocation requires two breaks in each of two chromosomes and is, therefore, a rare type of rearrangement. Patau, et al.[6] have described several individuals bearing an insertion (involving chromosome 1 and a member of group C) plus a normal chromosome. These individuals have a similar facial appearance, submucous bilateral cleft of the hard palate and a lobulated tongue which may or may not have pedunculated masses attached to the dorsal surface. Digital malformations include brachydactyly, syn-

dactyly and atypical finger-size relationships.[9]

Isochromosome formation results from mis-division of the centromere in a horizontal rather than longitudinal plane producing a chromosome with a *single arm doubly represented in the cell* and lacking the other half chromosome. Isochromosomes of X have been described. They contribute an additional sex chromatin body to the intermitotic nucleus when present as trisomics. Table 3 summarizes the common chromosomal re-arrangements and associated syndromes in man. Information regarding the etiology of spontaneous chromosomal re-arrangements is speculative. Such re-arrangements in human chromosomes may be induced by x-ray[14] or by radiomimetic drugs such as nitrogen mustard.[1]

The frequent occurrence of 15/21 or 21/21 translocation may stem from the close association of the group D and G chromosomes in the cell. All the acrocentric (satellited) chromosomes may be involved in the organization of the nucleolus and are often in close proximity in the cell. The association of such regions and the presence of small heterochromatic segments in the short arms of the acrocentrics may enable more frequent exchanges in these areas. Heterochromatic segments of chromosomes of other organisms have been observed to have an increased incidence of breakage. Heterochromatin generally is considered to have limited genic function and it is possible that such regions as short arms of acrocentrics, when lost, would represent a minimal loss of genes. Therefore, the gametes would be more likely to survive the loss than in situations where large segments of chromosomes or those which have genes which are important for survival of the gametes, are eliminated.

One of the most likely reasons for the frequent observations of translocation of acrocentric chromosomes is the ease of observation of re-arrangements in these easily identifiable groups. This fact is equally true for all the re-arrangements of human chromosomes thus far described. The chromosomes which have been involved in re-arrangements are those which are most readily recognizable in the cell. It is certain that as observation and continued technical improvement occurs, additional translocations will be recognized.

The field of human cytogenetics is young and rapidly growing. The many cytogenetic observations in plants and animals are gradually being duplicated in man. Chromosomal abnormalities have been sought in many well-known syndromes. A partial list of clinical entities with normal chromosomes, by present technics, is shown in Table 4.

There are many questions yet to be answered. A few are particularly provoking:

CHROMOSOMAL RE-ARRANGEMENTS AND ASSOCIATED CONGENITAL ANOMALIES

Chromosomal Re-arrangement	Malformation
*Translocation:**	
13/21 or 22	Mental retardation, failure of speech and development
21/21 and/or 15/21	Familial mongolism
Deletion:	
21 or 22	Chronic Myeloid Leukemia
Insertion:	
Insertion of segment of "C" into chromosome 1	Orofacial-Digital syndrome

* Severol other sporadic translocations hove also been reported.

Table 3

SOME PATHOLOGICAL CONDITIONS WITH NORMAL CHROMOSOME COMPLEMENTS

Achondroplasia	Hydrocephalus
Albright's syndrome (polyastotic fibrous dysplasia)	Hypopituitary dwarfism
Amyotonia congenita	Huntington's chorea
Anencephaly	Hurler syndrome
Apert's syndrome (acrocephalosyndactyly)	Incontinentia pigmenti
Arthrogryposis	Klippel-Feil syndrome
Bourneville-Pringle syndrome	Laurence-Moon-Biedel syndrome
Cleft palate and hare lip	The Marfan syndrome
Chondrodistrophy—Cruzon's disease	Microcephaly
Cyclops deformity	Multiple Neurofibromatosis (Von Recklinghausen disease)
Dwarfism	Ostiogenesis imperfecta
Ehlers-Danlos syndrome	Phenylketonuria
Frohlich's syndrome (adiposogenital syndrome)	Pyloric Stenosis
Gaucher's disease (cerebrosidosis)	Tay Sack disease
Hallermann-Streiff syndrome	

Table 4

Why is there an increase in nondisjunction with increased age?

What relationship does the sex chromatin have to the function or lack of function of the X chromosome in man?

What factors can produce chromosomal aberrations in man?

The investigation of such questions will give understanding to the origin of chromosomal abnormalities.

GLOSSARY

Aerocentrie: A chromosome with centromere attachment close to one end, subterminal.

Anaphase: The stage of mitosis in which the chromosomes separate and proceed toward the opposite poles of the spindle.

Aneuploidy: A condition in which there is an irregular number of chromosomes, i.e., not a good multiple of normal set—as in man 46 + 1 or 46 — 1 are aneuploid numbers.

Autosome: Any chromosomes of a cell exclusive of the sex chromosomes.

"Barr" body: The sex chromatin of a nucleus, usually observed as a small, lateral and darkly staining body in the metabolic nucleus. Normally found only in female cells.

Centromere: The point of a chromosome at which the spindle fibers originate. It appears as a non-staining area or constriction in the chromosome and, as such is a readily recognizable morphological feature.

Chiasma: (Plural-Chiasmata) The crossing of two non-sister chromatids in meiosis resulting from prior (genetic) exchange of segments of two paired chromosomes.

Chromatids: The associated half chromosomes resulting from longitudinal duplication of a chromosome. The sister chromatids are held together at the centromere until they separate at anaphase.

Crossing-over: The exchanges between paired chromatids of groups of genes during prophase of meiosis resulting in re-combination of genes of one chromosome pair.

Cytogeneties: That field of genetics in which an attempt is made to correlate chromosomal and genetic observations.

Deletion: The loss of a segment of a chromosome by chromosome breakage.

Diploid: The "two ploid" (2n) condition (i.e., having two sets of chromosomes) found in the fertilized egg and in somatic cells of man.

Gamete: A mature germ cell—the egg or sperm.

Genome: The complete diploid set of chromosomes of an individual.

Haploid: A cell having only one set of chromosomes, such as the egg or sperm (1n).

Heterozygote: A zygote, (i.e., fertilized egg) having unlike members of a pair of genes (*alleles*) controlling a certain character.

Idiogram: The diagrammatic representation of the chromosomes of an individual based on measurements of chromosomes of several or many cells.

Insertion: A type of chromosomal aberration in which a segment of one chromosome is inserted into another unlike chromosome.

Isochromosome: An equal-armed chromosome resulting from mis-division of the centromere in a transverse rather than a longitudinal plane.

Karyotype: A systematized array of chromosomes of a single cell prepared by drawing or pho-

tography—typifying the chromosomes of an individual or species.

Meiosis: The reductional divisions which result in a halving of the chromosome number and which precede gamete formation in man.

Metacentric: A chromosome having the centromere in the median position; the chromosome arms are of equal length.

Metaphase: The stage of division in which the chromosomes are aligned at the middle of the spindle. The chromosomes exhibit characteristics of contraction at this stage and are recognizable as metaphase chromosomes even in situations where no spindle is present, i.e., colchicine-arrested metaphase.

Mitosis: The regular division of somatic cells. (See text.)

Mosaicism: A situation in which one area of an organism has one genetic or chromosomal type and another area a different genetic composition.

Non-disjunction: A condition in which both chromosomes of a pair at meiosis (or both chromatids at mitosis) go to the same cell.

Phenotype: The visible characteristic (i.e., the clinical picture).

Polyploidy: The presence of exact multiples of basic chromosome number—i.e., of complete extra *sets* of chromosomes.

Replication: Production of like-deoxyribonucleic acid molecules in the chromosome. This is to be differentiated from morphological duplication of the chromosome and precedes the latter.

Satellite: An appendage of a chromosome frequently associated with nucleolar organization. Appears like a small knob or fragment attached by a thread to the chromosome. These occur *only* on certain chromosomes and are therefore good morphological markers.

Sub-metacentric: A chromosome with the centromere in a sub-median position, i.e., between a median and terminal position.

Telocentric: A chromosome with the centromere attached at the end. The terms acrocentric and telocentric are often used synonomously, but there is a slight difference in meaning.

Tetraploid: A polyploid cell or organism having four sets of chromosomes (4n).

Translocation: The transfer of a segment of one chromosome to another unlike chromosome.

Triploid: A cell having three complete sets of chromosomes (3n).

Trisomy: An aneuploid condition in which one chromosome is represented three times instead of the normal two. *Partial trisomy*, a situation in which a part of a chromosome is represented three times.

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First Place Winner
Journal Medical Essay Contest

Foramen of Bochdalek Hernia In Pregnancy

JAMES L. FLOOD, M.D.*
Lafayette

IN THE EMBRYO the thoracic and abdominal portions of the body cavity communicate freely with each other. The ventral part of the diaphragm is formed from the septum transversum which separates the heart from the abdominal viscera. This septum is joined posteriorly by a proliferation of mesodermal cells at the upper end of the dorsal mesentery to make a bridge across the coelomic cavity from front to back.

Openings are left in both posterolateral parts of the diaphragm which are known as pleuroperitoneal canals. These canals are later closed by a double layered membrane, consisting of peritoneum on one side and pleura on the other. Striated muscle then develops between these two serous coats to complete and strengthen the partition between the peritoneal and pleural cavities. Ladd and Gross report that the formation of the diaphragm is sufficiently complicated so that there is little wonder that congenital defects are apt to appear[1] (Figure 1).

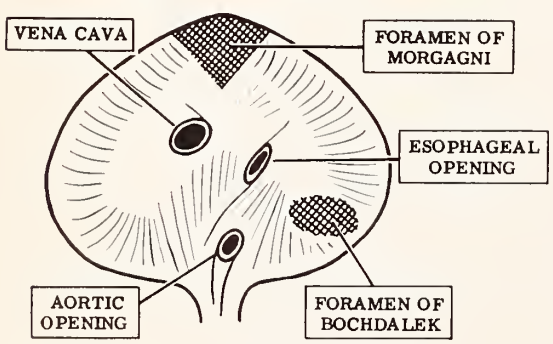


FIGURE 1

A congenital diaphragmatic hernia in a newborn calls for prompt surgical intervention.

A cyanotic newborn with rapid respiration, poor expansion of the chest on the affected side and a scaphoid abdomen suggests a diaphragmatic hernia.

Physical examination reveals absence of breath sounds on the affected side and diminished breath sounds on the opposite side due to encroachment of the mediastinum on the opposite lung. X-ray of the chest shows a typical bowel pattern of gas.

Accurate Diagnosis Essential

About the only differential diagnosis to be considered is postpneumonic lung cysts which on x-ray may be mistaken for loops of bowel. A careful history should eliminate the possibility of this error.

Once the diagnosis is made, surgical repair of the defect should be instituted. Prior to surgery a No. 16 catheter should be used to empty the stomach. Under general intratracheal anesthesia a left rectus incision is made, the defect located and a catheter inserted into the hernial orifice to allow air to enter the chest as the bowel is pulled down. Otherwise a vacuum is created. After reduction of the intestinal contents, the hernia is repaired with interrupted silk sutures. It is usually not possible to do a primary closure of the abdominal incision; normally only the peritoneum and skin are closed. Then, a week or so later, after the right of domain is established, the incisional hernia can be closed.

We have presented the embryology, diagnosis and treatment of pleuroperitoneal hernia. The following is a presentation of

* Surgery resident at St. Elizabeth Hospital.

an unusual case in which this type of diaphragmatic hernia was found in a pregnant female.

Case Report

A 22-year-old white female was admitted to the hospital on 10-16-61 with extreme dyspnea. Ten days before admission she had consulted her doctor because of left flank pain. Three days prior to admission she complained of increasing difficulty in swallowing, to the point where she could barely swallow her own saliva. She also had fairly acute respiratory distress. She was in the seventh month of pregnancy. On the day of admission a complete history was taken and complete physical examination was performed. A barium swallow and chest x-ray were done (Figure 2, Figure 3).

She had had several chest films taken while in high school. No significant abnormalities were noted then. For the past ten years she had had a history of bloating and left upper quadrant fullness. No history of dyspnea on exertion other than that previously mentioned had ever been noted. With these bouts of bloating she stated that she had considerable generalized abdominal cramping. The only previous surgery was an appendectomy at the age of five.

The patient weighed 120 lbs., and was in acute respiratory distress. The fundus of the uterus was palpable about 6 cm. above the umbilicus. The fetal heart tones were normal and at the rate of 132. The left side of her chest was dull to percussion, and no breath sounds were noted. The right side was normal. Blood pressure 140/100, pulse 120, respirations 24, temperature 98°, hemoglobin 15.6 gms.%, white blood count 20,700. It was decided that she should be operated upon.

Under general endotracheal anesthesia, a midline incision was made from the xiphoid to the umbilicus. A seven month pregnant uterus was encountered. The spleen was also encountered to the left of the uterus. It appeared bluish. A pleuroperitoneal hernia was found (hernia of the foramen of Bochdalek). By incising the left diaphragm above this defect in a vertical fashion, it was possible to free the stomach from the thoracic cavity. A portion of the transverse colon was also in the left thorax.

Just prior to this, the stomach, a small portion of which remained in the abdomen, was decompressed by making a small incision in it. After reduction of the stomach and the colon the hernia was repaired by interrupted heavy silk sutures. It was also

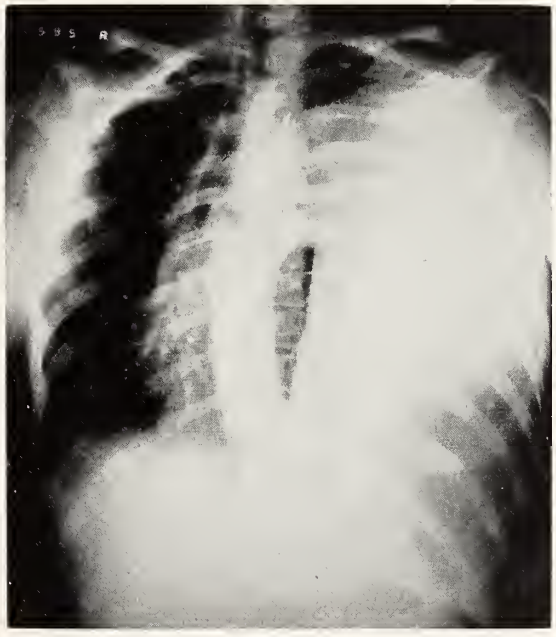


FIGURE 2

BARIUM SWALLOW reveals barium in the stomach in the left thoracic cavity.

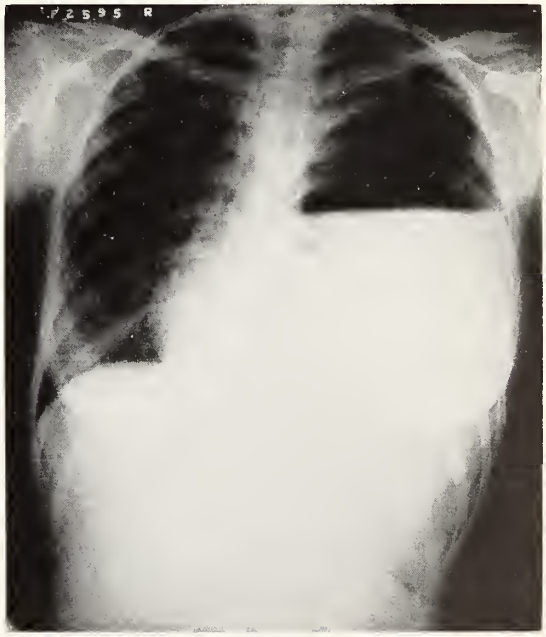


FIGURE 3

CHEST FILM shows high fluid level in the stomach. The stomach was entrapped in the left thoracic cavity.

noted that the cecum was in the left upper quadrant, but it was not a true malrotation. The cecum was replaced, as well as the ascending colon back along the right side of the abdominal cavity. Due to the fact that she was in an advanced state of pregnancy, it was felt best to close only the peritoneum and the skin, hoping that a cesarean section would be possible at a later date. A single chest tube was also inserted in the left thorax and attached to under-water seal.

The patient's blood pressure dropped following surgery, and was supported by Vasoxyl. The next day she started in labor and delivered a stillborn child. A week after her original surgery, she was taken back and under spinal anesthesia the fascia was approximated to take care of the iatrogenic incisional hernia. She did well postoperatively. The chest film showed the chest to be clear. She was able to eat normally and was dismissed on 10-26-61.

Summary

A hernia of this type of the pleuroperitoneal space is an interesting entity. It is rare and usually encountered only in the newborn. A finding of a hernia of this type in a 22-year-old woman, complicated by pregnancy, is an unusual situation.

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A Warning from Britain

The thalidomide disaster has put the drug houses in a bad light and hardly a voice is raised to mention penicillin, streptomycin, the tetracyclines, cortisone and the host of other drugs which have saved countless lives and shortened the course of so many illnesses. Judging by the present climate of opinion, the drug houses would appear to be set on killing, poisoning or deforming the general public. Other charges can also be brought against them. Unlike all other details of the Health Service, the drug houses are independent. They represent Private Enterprise, which can hardly commend them to the Ministry, or for that matter to any of the various ministers we have had, judging by the "support" they have given independent medicine in the past twelve years.

The result of all this is the extraordinary exhibition of the Ministry attacking the drug houses for daring to publicize their products. Are we to take it that the cost of a few representatives and all that blotting paper and advertising blurb is a significant factor in the £800 million bill for the health service? Perhaps before long the general practitioners' compulsory source of information will be Prescriber's Notes. With great respect to the eminent band of academicians who compile these notes, one does wonder at times how penicillin would have fared in 1942 had it had to pass their scrutiny. Would their summing up have been a recommendation for more careful asepsis rather than using this new, expensive and wholly unorthodox antibiotic stuff?

If doctors lose the right to prescribe and use whatever drugs they like, or if they ever allow this right to be diminished, they will have lost one of their most essential freedoms. And it could be lost very easily.—Reprinted from *Fellowship for Freedom in Medicine*, Oct., 1962

Crouzon's Disease

Variations in Paternal-Offspring Genetic Penetration

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THE PURPOSE of this report is to present unusual manifestations of Crouzon's disease as witnessed in a father-son combination. It would appear as though the father's involvement was of *forme fruste* quality while the son's affliction was quite severe. Visual acuity in the son, however, was maintained past the critical period, usually regarded as the tenth year of life.

The boy was born in August, 1949, and showed no defect at birth, however, his early development showed a lag. He sat alone at eight months of age, walked at 14 months but did not talk until he was two years old. Childhood illnesses were minor. Photographs exhibited by the mother substantiated the fact that the child's facial configuration began to change at about four years of age. He remained reasonably well until the fall of 1960 when he developed left frontal headache which, at times, was of migrainous quality, and which often awakened him. His school work was good and he was able to compete in athletic programs with pupils his own age.

Ten days prior to his hospital admission, he was examined because of a hearing problem and headache. Examination revealed an allergic rhinitis. The eustachian tubes were found to be patent. The Weber test was localized to the right and the Rinné test was equivocal. The audiogram showed the hearing defect to be bilateral and parallel, with an average loss of 25 decibels in the range of 125-2,000 vib. sec., slight improvement in the 2,000-4,000 vib./sec. range and greater loss in the 4,000-8,000 vib./sec. range.

The family history was significant in that the child closely resembled his father and that several members of the family suffered from color blindness.

Visual Field Studies Normal

Further observations carried out at the hospital showed the boy to be mentally alert and cooperative. His height was 61″ and weight 90 lbs. The head appeared small and measured 20¾ inches (O.F.). Vision was 20/20 in each eye and a small hyperopic refractive error was noted. There was both hypertelorism and exophthalmus and the exophthalmometer readings were 25 mm. for each eye. The extraocular movements were normal and there was no evidence of strabismus or nystagmus. The pupils reacted to light and accommodation and convergence were present. Examination of the fundi did not show any significant abnormality. The optic discs were flat and had normal color. Visual field studies were entirely normal, as was color vision.

No other defect was found, blood pressure readings and neurological examination being entirely normal. The blood count, urine, chest x-ray, and spinal fluid cell count and protein concentration were within normal range. The spinal fluid pressure was found to be 150 mm. (water) at rest and the patient did not develop headache following the procedure. There was thought to be no relationship between the skull deformity and the hearing defect.

It was the concensus of the examining group that surgical interference was not justified and the patient was discharged from the hospital to be observed at six month intervals.

Examination of the father both physically and roentgenologically points out the

* From the Department of Pediatrics, Community Hospital.



FIGURE 1

FRONT AND PROFILE view of potient, note the degrees of hypertelorism and exophthalmus present.

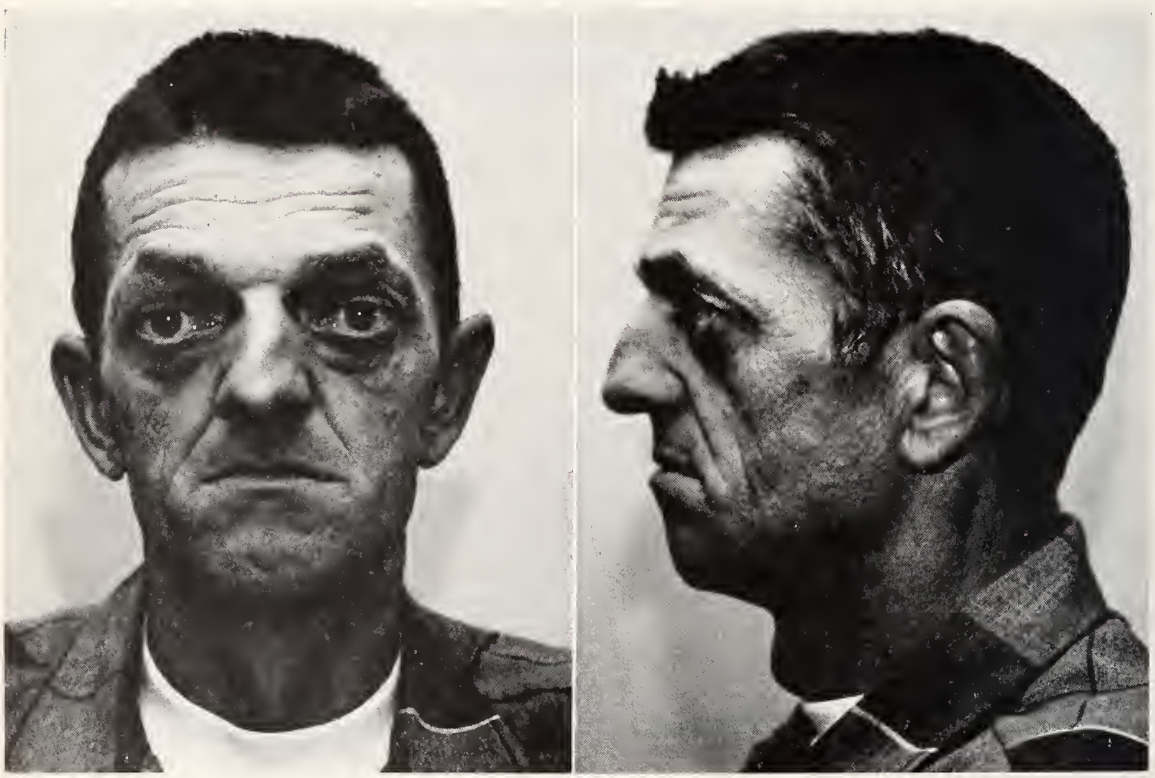
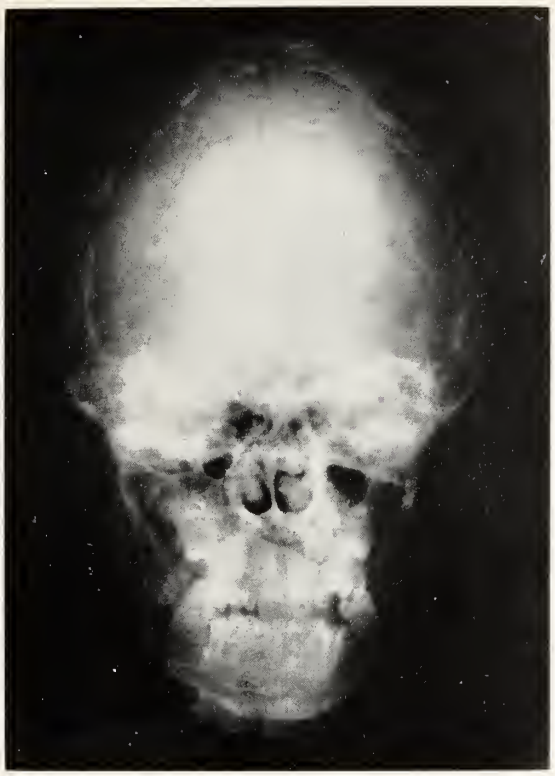


FIGURE 2

FRONT AND PROFILE view of potient's father. Note the resemblonce between father and son, olso the presence of definite moxillary hypoplasio not opporent in the son.



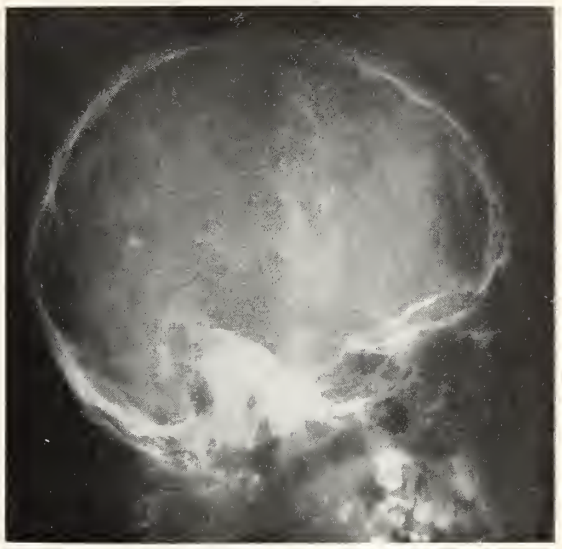


FIGURE 3

FRONT AND RIGHT LATERAL x-rays of patient's skull, shawing the "beaten-silver" appearance and absence of suture lines.

presence of arrested Crouzon's disease. He manifests a definite degree of maxillary hypoplasia not at all apparent in the son. There is no appearance of craniostenosis which adds final evidence of "genetic escape."





FIGURE 4

FRONT AND RIGHT LATERAL skull x-rays of patient's father, far camparisan see Figure 3.

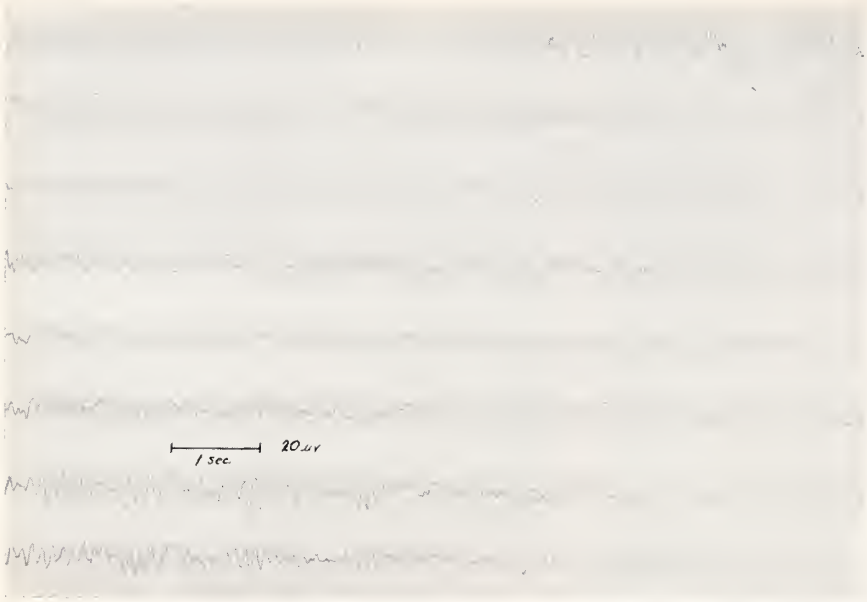


FIGURE 5
E.E.G. of patient manifesting a Grade I dysrhythmia.

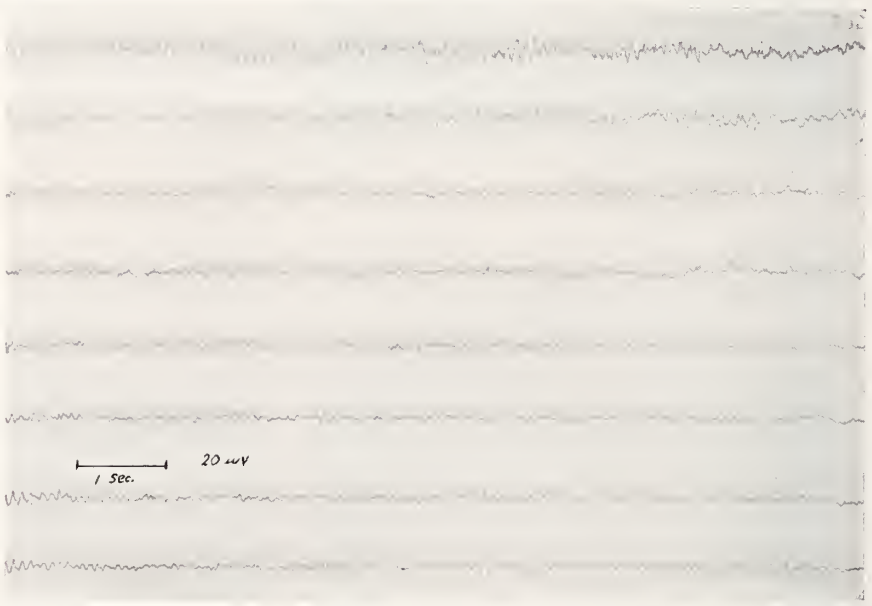


FIGURE 6
NORMAL E.E.G. of patient's father.

Disease a Mendelian Inheritance

The classic description of craniofacial dysostosis by Crouzon[1] included craniostenosis, maxillary hypoplasia with protrusion of the jaw, exophthalmus with divergent squint, and a hard palate which manifested both narrowness and high arch. The nose was noted to be rather parrot-like. A recent study of the disorder[2] has noted the above characteristics as necessary for diagnosis plus the added feature of "hereditary occurrence." It must be pointed out that the presence of the high narrow arched palate has been described in a variety of heredofamilial disorders particularly Lobstein's disease (Ossium Fragilitas). It is equally significant that the hereditary quality is present in some 50% of cases and here the mode of transmission would involve an irregular dominant. A large number of sporadic cases have been reported which led one author[3] to conclude that transmission involved a mutational "chromosomal defect or a recessive characteristic."

The cases here presented follow the pattern of a disease transmitted as a Mendelian dominant since it exists in one parent. No further instances of the disorder could be found in the lineage going back to grandparents. The penetrability of the

genetic aberration must vary markedly since the degree of involvement is shown to vary greatly. This fact is accentuated by the observations of Shiller[4] who traced the disorder through four generations beginning with mildly afflicted ancestors and ending with severely involved young descendants of the family.

Acknowledgment

The authors gratefully acknowledge assistance from Drs. Clifford Taylor and David Wheeler (radiologists); Drs. J. T. Luros and E. C. Hann (neurosurgeons), and Mr. Joseph J. Reynolds, (photographer).

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From *The Journal* Fifty Years Ago

Mackenzie[13] decries the indiscriminate removal of tonsils and, as his opinions represent a small minority view of the question, they are here liberally abstracted. "Never in the history of medicine has the lust for operation on the tonsils been as passionate as it is at the present time. It is a mania, a madness. It has infected not only the general profession but the laity." Continuing, he expresses the following views:

The functions of the tonsil are unknown. They may protect the throat or they may, on the contrary, be the portals of entrance for infection. The tonsil is not a lymphatic gland, but is more nearly related to the thymus and thyroid glands. The role of the tonsils as portals of infection has been greatly exaggerated. Good and even better results are obtained, according to Mackenzie, by partial removal of the tonsil than by complete enucleation. Even in quinsy, slitting up and shrinking the upper lobe of the tonsil is the method advocated. Clipping the tonsils by means of the guillotine is the method of choice in operations on children.

Complete enucleation is condemned, except in persons where the tonsil is totally diseased, is usually unnecessary and may be supplanted by many other methods which are perfectly safe and efficient and not open to the serious objections of tonsillectomy. It occasionally happens that the enucleation of a buried tonsil is followed by the burial of the patient. The amount of reckless surgery done on the tonsils will never be known. The results of such surgery are becoming daily a menace to the public good. The hope is expressed that the senseless slaughter of the tonsils be stopped.

John F. Barnhill, M.D., "The Year's Progress in Otolaryngology," *JISMA*, January, 1913.

13. *Ann. Oto-Laryngol. and Rhinol.*, June, 1912.

A Preliminary Study of 51 Cases†

Clinical Evaluation of the Thymoleptic Effect of Tranylcypromine

*JOHNSON CHU, M.D.,**
*ERNEST J. FOGEL, M.D.***
Logansport

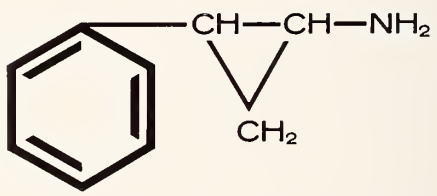
TRANYLCYPROMINE is a non-hydrazine monoamine oxidase inhibitor with a chemical structure like amphetamine (Figure 1) which may account for the fact that it seems to act rapidly.[1, 2, 3] Like other monoamine oxidase inhibitors, tranylcypromine appears to act through enzyme inhibition, but it is not clear how it does this. Unlike these other compounds, however, it is said to have a bi-modal action; that is, it exerts both direct and indirect effects on neuronal cells.[4]

To find out if it would be clinically useful, particularly in patients who had reached a plateau on tranquilizers or other antidepressants, we evaluated it at Logansport State Hospital between September, 1960 and August, 1961.

Patient Group

The drug was used in 51 hospitalized patients selected because of primary or secondary depressive symptoms. Twenty patients had primary and 31 had secondary depressive symptoms. The diagnoses were: schizophrenia with depressive symptoms, 20; involutional psychotic reactions, 6; psychoneurotic depressive reactions, 6; manic depressives, depressed, 5; psychotic depressive reactions, 2; and personality disorders, alcoholics, and chronic brain syndrome, 12. There were 40 women and 11 men between the ages of 28 and 80 years. The majority were between 30 and 49 years of age; four were 29 or under, and only two were over 69. Some were newly admitted and had been hospitalized for only two weeks; others were chronic patients who had been hospitalized for two years or more.

tranylcypromine



dextro-amphetamine

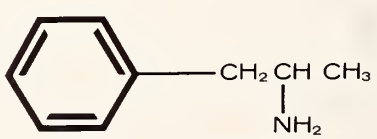


FIGURE 1

We gave each patient a physical examination, including electrocardiograms for those with known cardiac complications. The drug was administered twice daily; one patient received 50 mg. daily, the others received 20 mg. in the morning and 10 mg. at noon. We maintained this dosage (30 mg. daily) except when temporary reductions were made to control side effects. All but ten patients had been receiving one or more

† Presented at the Indiana Neuropsychiatric Association Meeting, Indianapolis, October 11, 1961.

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psychopharmacological drugs (tranquilizers or antidepressants or combinations of the two) with only partial relief, these drugs were continued during the evaluation. At first, tranylcypromine was given to all patients; later, however, placebos were substituted in 18 who had shown favorable response to the drug.

Liver function tests (cephalin flocculation, alkaline phosphatase, thymol turbidity, serum protein, including albumin-globulin ratio, and serum bilirubin) were run at the beginning of the tranylcypromine evaluation and repeated two to four weeks later. Blood pressure readings were taken daily with the patient in both a sitting and standing position.

Other than the addition of tranylcypromine, no changes in the patients' routines such as ward activities, occupational therapy, or psychotherapy were made.

Results

Although improvement was noticed in some patients within four days, response to the drug was judged at weekly intervals in terms of subjective and objective changes in mood and psychomotor states. Patients whose moods had been characterized by apathy, indifference, agitation, withdrawal, despondency, self-depreciation and suicidal thoughts who became active, cheerful, cooperative, sociable and whose depression lifted were considered to have a *marked thymoleptic* response to tranylcypromine. Those who became less depressed, more active and communicative were rated as *moderate thymoleptic* responses; others who showed little or no improvement were considered *slight* responses or *no* response. We found that 15 patients showed *marked*, 22 *moderate*, and 8 *slight* thymoleptic response; 6 patients showed *no* response.

In most patients, the *marked* to *moderate* response was obtained within two weeks; some, however, responded within four days, and others four weeks. Patients with symptoms of primary depression appeared to respond slightly better than those with secondary depression; 75% marked to moderate thymoleptic effect compared to 71%.

Of the 18 patients who were changed to placebo after showing marked or moderate response to the addition of tranylcypromine, four became depressed again within one week, the others maintained their therapeutic gains for longer periods of time, one as long as two months. This, of course, raises the possibility of the so-called placebo effect, but considering the patient's pre-treatment condition and the fact that most of those who maintained improvement had received three to four weeks of drug therapy, it is unlikely that any change would have been observed without the addition of tranylcypromine.

One 42-year-old woman with a depressive reaction, who had been receiving meprobamate (400 mg. at night) became more cheerful and talkative seven days after tranylcypromine was started. When a placebo was substituted, she became depressed again within three days. A 34-year-old woman, whose depressive reaction included suicidal ideas, had been receiving thioridizine and meprobamate; three weeks after tranylcypromine was added, she showed marked improvement and maintained it when a placebo was substituted. On the other hand, no change was noticed when a placebo was first substituted in another patient who had become responsive and communicative after two weeks' therapy with tranylcypromine. However, within four weeks she became uncommunicative again.

Side Effects

In order of their frequency the side effects were: hypotension—11 patients; overstimulation—8; vertigo—3; GI upset—2; and headache, skin rash and numbness of hands and feet, 1 each. Most were controlled by temporary reduction of dosage.

One patient who had been started on 50 mg. of tranylcypromine a day and was also receiving 20 mg. of methaminodiazepoxide three times a day showed a change in blood pressure from 178/80 to 116/70 and fainted several times. When her dosage of tranylcypromine was reduced to 30 mg. daily, she showed a marked thymoleptic response, her blood pressure returned to normal, and she had no more fainting spells.

Overstimulation was characterized by increased talkativeness, restlessness, fine tremor of hands, trembling of jaw and

jerking of eyelids; these symptoms were noticed during the second or third week and disappeared when the dosage was reduced temporarily. However, in one patient with insomnia, nervousness and headache, tranylcypromine had to be discontinued. In another, it was discontinued because the patient, a 73-year-old woman, developed a fever and profuse sweating. She had been receiving imipramine, 25 mg. three times a day, prior to, and during the administration of tranylcypromine. Similar reactions have been reported by others with the combined use of imipramine and monoamine oxidase inhibitors, which is now generally considered to be an unwise combination.

Liver function tests remained within normal limits in all except one patient. This woman, a 54-year-old involutional depressive, had been receiving chlorpromazine, 150 mg. four times a day, which was continued during the tranylcypromine administration. Liver function tests confirmed the diagnosis of obstructive jaundice, so the chlorpromazine was discontinued. The jaundice cleared and the patient showed a moderate thymoleptic response to continued tranylcypromine.

Two patients died of bronchopneumonia during the evaluation. One was a 62-year-old involutional psychotic who died one day after the drug was started. The other, a 52-year-old woman, diagnosed as a manic depressive, depressed type, died four days after the drug was started. Neither received any concomitant psychopharmacological drugs. Autopsy findings on the second patient revealed Laennec's cirrhosis of the liver. These two fatalities, therefore, were coincidental rather than related to the administration of tranylcypromine.

Summary and Conclusions

The administration of 30 mg. daily of tranylcypromine alone or in combination with psychopharmacological drugs, mostly tranquilizers, produced marked to moderate therapeutic response in 37 (72.5%) of 51 hospitalized patients with primary or secondary depressive symptoms. It seemed particularly useful in patients who had shown marginal improvement or who had reached a plateau of improvement from other drug therapies. Most patients responded within two weeks, although some responded in four days and others in four weeks.

Side effects of hypotension, overstimulation, vertigo, and headache while relatively frequent, were seldom severe enough to interfere with therapy. It is suggested, however, that tranylcypromine should not be used with imipramine. Tranylcypromine compares favorably with other monoamine oxidase inhibitors and appears to provide more rapid therapeutic effects.

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A Clinical Investigation of Contact Lenses

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DO PATIENTS wear their contact lenses? If so, how long and how comfortable is the wearing time? Does the wearing of contact lenses result in corneal damage?

To secure answers to these questions, 100 patients, nearly consecutive as to issuance of their contact lenses, were subjected to meticulous interview and complete ophthalmological examination. The comparable efficiency of corneal versus scleral contact lenses was ascertained wherever possible. It is to be emphasized, however, that such a comparison is difficult since, in the vast majority, corneal lenses were prescribed for cosmetic reasons whereas scleral lenses were issued for occupational and medical reasons.

Method and Discussion

The data secured herein is presented in tabular form.

Reosons far obtaining contact lenses	Corneol Lenses		Scleral Lenses	
	Coses	Percent of tatal	Coses	Percent of total
Cosmetic	55	90	13	33
Occupational	0	0	10	26
Medical				
Aphakia	5	8	8	20.5
Keratoconus	0	0	7	18
High myopia	1	2	0	0
Trichiasis	0	0	1	2.4

Table I-a

Scleral contact lenses were prescribed for athletes in 26% and 18% for individuals exhibiting corneal disease (keratoconus).

As anticipated, the vast majority of individuals wearing both corneal and scleral lenses were myopic. Scleral lenses were worn by a greater number of hyperopic and aphakic individuals reflecting their occupational usage.

Refractive Error	Corneal Lenses		Scleral Lenses	
	Cases	Percent af total	Coses	Percent af total
Hyperopia	5	8	6	15
Myopia	49	80	18	46
Mixed astigmatism	1	1.6	0	0
Keratoconus	0	0	7	18
Aphakia	6	10	8	21

Table I-b

Haw frequently contact lenses are worn	Carneol Lenses		Sclerol Lenses	
	Cases	Percent af tatal	Cases	Percent af total
Daily	38	62	10	25.6
Occasionally	19	31	15	38.4
Never	4	7	14	36

Table I-c

This table clearly demonstrates the increased frequency with which patients wear their corneal lenses in contradistinction to those wearing scleral lenses. Scleral contact lens wearers are far more prone to discontinue use of the lenses.

Contact lenses alternated with glasses	Corneol Lenses		Scleral Lenses	
	Cases	Percent af totol	Coses	Percent of total
Yes	42	75	25	80.6
No	14	25	6	19

Table I-d

The majority of patients alternate wearing contact lenses and spectacles during

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the day. No appreciable difference between the two groups was observed, in this respect, with exception, of course, of the monocular aphakics.

Average number of haurs contact lenses worn	Corneal Lenses		Scleral Lenses	
	Cases	Percent af total	Cases	Percent of total
0	4	6.6	14	35.8
1 hour	4	6.6	3	7.7
1-4 hours	10	16.3	6	15.4
4-8 hours	16	26.1	13	33.2
Over 8 hours	27	44.3	3	7.7

Table I-e

A comparison of the average daily wearing time for corneal versus scleral lenses shows there is a marked variation at the two extremes of the chart. Fourteen (35.8%) of the scleral lens patients have discontinued use of the lens in comparison to only four (6.6%) of the corneal lens wearers. At the other extreme 27 (44.3%) of the corneal lens patients wore their lens over eight hours while only three (7.7%) of the scleral lens users exhibited a similar wearing time. Many patients having corneal lenses wore them for 12-16 hours a day with comfort. (Our patients were advised that we do not advocate a greater wearing time than 12 hours.)

Both groups complained of trouble with their contact lenses, irritation, by far, being the most frequent complaint. It is interesting to note that there was no marked difference between the percentage of patients complaining of difficulty with contact lenses. As shown previously, however, patients using corneal lenses had a significantly better wearing time; assumably corneal lenses produce irritation of an insufficient degree to appreciably interfere with wearing time. Scleral lens wearers were critical of the need and availability of fluid and difficulty of lens insertion. Both were important factors influencing discard of scleral lenses.

Any trouble experienced with cantact lenses?	Corneal Lenses		Scleral Lenses	
	Cases	Percent of total	Cases	Percent of tatal
Yes	34	55.4	26	66.6
No	27	45.6	13	33.3

Table I-f

Source of trouble with cantact lenses	Corneal Lenses		Scleral Lenses	
	Cases	Percent af total	Cases	Percent af total
Inserting	4	6.5	10	25.6
Removing	3	4.9	1	2.6
Irritation	33	53.8	25	64.0
Poor vision	0	0	1	2.6
Fogging	4	6.5	3	7.7
Headache	0	0	1	2.6
Bubbles	0	0	6	15.4
Nervous	1	1.6	0	0

Table I-g

Patient satisfied with contact lenses	Corneal Lenses		Scleral Lenses	
	Cases	Percent of total	Cases	Percent of total
Yes	46	75	26	58.9
No	15	25	16	44.1

Table I-h

Seventy-five percent of the corneal lens patients as compared to 58.9% of the scleral lens users were satisfied with their lenses.

Will patient continue to wear contact lenses?	Carneal Lenses		Scleral Lenses	
	Cases	Percent of total	Cases	Percent of tatal
Yes	60	98.4	32	82
No	1	1.6	7	18

Table I-i

Ninety-eight and four-tenths percent of the corneal lens and 82% of the scleral lens patients reported that they would continue to wear their lenses. Several of the patients no longer wearing their lenses decided to make a renewed attempt after being examined—accounting for the difference between the figures given for the number not wearing their lenses and the number anticipating continued use. The above figures specifying those satisfied with their contact lenses are somewhat misleading. If confined only to those individuals who obtained contact lenses for cosmetic reasons (Table I-j) 76% of the corneal lens group versus 33% of the scleral lens group are satisfied.

Comporisan of sotisfied potients wha received lenses for cas-metic purpases	Carneol Lenses		Scleral Lenses	
	Cases	Percent of tatal	Cases	Percent af tatal
Satisfied	42	76	5	33
Not satisfied	13	24	10	67

Table I-j

Wauld potient abtoin cantact lenses ogoin?	Carneal Lenses		Scleral Lenses	
	Cases	Percent af tatol	Coses	Percent af tatal
Yes	56	92	32	82
No	5	8	7	18

Table I-k

Ninety-two percent of the corneal lens and 82% of the scleral lens groups claimed that they would obtain contact lenses again. This apparent discrepancy from the percentage of patients satisfied with their lenses perhaps indicates their strong desire to wear contact lenses. We have the impression that some of our patients who were unhappy with their lenses were unwilling to admit they had made a mistake, and a number of patients stated they had at least satisfied their curiosity.

Any specular blur experienced?	Carneal Lenses		Sclerol Lenses	
	Cases	Percent af total	Coses	Percent af tatol
Yes	35	64.8	12	38.7
No	19	35.2	19	61.3

Table I-l

These figures reveal that greater specular blur occurred among the corneal lens wearers. This, perhaps, indicates more trauma to the cornea results from the wearing of this type lens.

Does the potient function os well in his daily octivities with cantoct lenses os with spectocles?	Corneol Lenses		Sclerol Lenses	
	Coses	Percent af tatol	Cases	Percent af tatal
Yes	32	52.4	19	48.7
No	29	47.6	20	51.3

Table I-m

Approximately 50% of the patients in each group related they could function as well with their contact lenses as with spectacles. The principal complaints were irritation, lacrimation and blurring of vision, especially among the students. Photophobia in bright sunlight for some necessitated wearing sunglasses. Contact lenses improved the visual functions of many patients permitting the wearers to perform activities previously denied them when wearing spectacles.

Cantoct lenses ever disladged while wearing?	Corneol Lenses		Sclerol Lenses	
	Coses	Percent of tatal	Coses	Percent af tatal
Yes	16	26	0	0
No	45	74	39	100

Table I-n

Contact lenses ever lost?	Carneal Lenses		Scleral Lenses	
	Coses	Percent af tatol	Cases	Percent af tatal
Yes	9	14.7	0	0
No	52	85.3	39	100

Table I-o

Unexpected dislodgement of the lenses did not occur among wearers of the scleral variety. Sixteen (26%) of the corneal lens group had experienced dislodgement of the lens either with rubbing of the eyes, bending over, blinking or just spontaneously. Nine (14.7%) of the corneal lens wearers had lost their lenses in a variety of ways; (1) upon insertion, (2) removing, (3) down the drain when being cleansed, or (4) spontaneous dislodgement.

Diplapia with monocular aphokia	Carneol Lenses		Sclerol Lenses	
	Coses	Percent af totol	Cases	Percent af tatal
Yes	0	0	1	12.5
No	5	100	7	87.5

Table I-p

Fusianol ability in manacular ophakia as checked with the Warth four dat test	Carneol Lenses		Sclerol Lenses	
	Coses	Percent of tatol	Cases	Percent af totol
Fusion at near	5	100	7	87.5
Fusion at far	4	80	6	75.0
Suppression near	0	0	1	12.5
Suppression far	1	20	1	12.5
Diplopia near	0	0	0	0
Diplopia far	0	0	1	12.5

Table I-q

Five patients were wearing corneal lenses for unilateral aphakia. None complained of diplopia and four were able to fuse the Worth four dot test. Among the scleral lens wearers were eight unilateral aphakia individuals. Only one noted diplopia while six were capable of fusion as indicated by the Worth four dot test. The majority of both groups were satisfied with their contact lens and all agreed their vision was better with depth perception.

Wearing Time Correlated With Sex of Patient Corneal Lenses				
	Female		Male	
	Cases	Percent of cases	Cases	Percent of cases
0 hours	3	5.9	0	0
1 hour	4	7.8	0	0
1-4 hours	10	19.6	0	0
4-8 hours	12	23.5	3	30
over 8 hours	22	43.1	7	70
Scleral Lenses				
0 hours	12	66.6	5	23.8
1 hour	1	5.5	0	0
1-4 hours	1	5.5	3	14.3
4-8 hours	4	22.2	13	61.9
over 8 hours	0	0	0	0

Table II

Among the relatively few males, all wore their corneal lenses at least four hours while seven (70%) reported over eight hours of wearing time. Of the females 34 (66.6%) were wearing the corneal lenses over four hours. Seventeen (33.3%) were not able to wear their lenses four hours a day. In the scleral group there was an apparent difference between the sexes with 12 (66.6%) of the females no longer wearing their lenses as compared to five (23.8%) of the males. Only four (22.2%) of the females wore their lenses 4-8 hours as matched to the 13 (61.9%) of the males.

This difference in wearing and wearing time of the scleral lens perhaps, can be explained by referring to Table III.

Sex of Patient Correlated With Reason for Contact Lenses		
Corneal Lenses		
	Female	Male
Cosmetic	50	5
Medical		
Keratoconus	0	
Unilateral Aphakia	1	4
High Myopia	0	1
Occupational	0	0
Scleral Lenses		
Cosmetic	12	1
Medical		
Keratoconus	2	5
Unilateral Aphakia	1	7
Trichiasis	0	1
Occupational	3	7

Table III

The majority of females obtained their lenses chiefly for cosmetic and vanity purposes. Males, on the contrary, obtained scleral contact lenses for medical and occupational purposes. Scleral lenses, in addition, are cosmetically not as satisfactory as corneal lenses.

All patients were examined with the biomicroscope after a minimum wearing time of one hour. Flourescein 2% had previously been instilled in both eyes. In the corneal lens wearing group corneal epithelial staining (indicating corneal epithelial trauma) increased in nearly direct proportion to the time of wearing. When significant staining was found the affected patient was advised to discontinue wearing the lens for 24 hours or at least to lower the wearing time. When re-examined, after discontinuing wearing the lens for 24 hours, all the corneae were clear. Shortening the wearing time merely reduced the intensity and extent of corneal epithelial staining.

Corneal Changes Correlated With Length of Time Lenses Worn					
	Corneal Lenses				
	No Corneal Changes	Corneal Changes			
		Superficial Staining	Cobblestone	Edema	Granularity
1 hour	15	13			1
1-4 hr.	10	5	1*		
4-8 hr.	3	7			
over 8 hours	1	6			
Total	29	31 (50.8%)	1		1
	Scleral Lenses[x]				
1 hour	17	3	0	0	0
1-4 hrs.	12	2	0	1	0
4-8 hrs.	0	2	0	1†	0
over 8 hours	0	0	0	0	0
Total	29	7 (21%)	0	2	

* cobblestone & stain
[x] One of scleral group refused to put on contact lenses for check.
† edema & stain

Table IV

One corneal lens patient disclosed an intense vesicular cobblestone epithelial reaction to the lens. This reaction cleared within minutes after removing the lens. Similar unexplained reaction has been seen in two other patients (not included in this study). A mosaic grey infiltrate, perhaps a variant of the above reaction, was seen in one patient wearing a scleral lens.

In Table V the wearing time is correlated with the contact lens fit. In the corneal group with a good lens fit 24 (53.3%) were wearing their lenses over eight hours while in the group with the apex close or touching only one could wear the lenses eight hours a day. There were only four patients with a tight fitting lens but this did not seem to decrease wearing time. In order to obtain maximum wearing time it seems important to have a satisfactorily

Contact Lens Fit Correlated with Wearing Time										
	Corneal Lenses									
	Good Fit		Close Fit		Touching		Tight		Loose	
Wearing Time	No. Cases	% Cases	No. Cases	% Cases	No. Cases	% Cases	No. Cases	% Cases	No. Cases	% Cases
0-1 hr.	2	4.4	0	0	1	50	1	25	0	0
1-4 hr.	7	15.3	5	50	1	50	0	0	0	0
4-8 hr.	12	26.6	4	40	0		0	0	0	0
over 8 hr.	24	53.3	1	10	0		3	75	0	0
	Scleral Lenses*									
0-1 hr.	6	18.2	1	50	0	0	0	0	1	50
1-4 hr.	11	33.3	0	0	1	100	0	0	1	50
4-8 hr.	16	48.5	1	50	0	0	0	0	0	
over 8 hr.	0	0	0	0	0	0	0	0	0	

* One of the scleral group refused to put on contact lenses for check.

Table V

Contact Lens Fit Correlated With Staining										
Corneal Lenses										
	Good Fit		Close Fit		Touching		Tight		Laase	
	No. Cases	% Cases	No. Cases	% Cases	No. Cases	% Cases	No. Cases	% Cases	Na. Cases	% Coses
No Stain	24	52	4	44.4	0		1	25	0	
Staining	22	48	5	55.6	2	66.7	3	75	0	
Cobblestone	0	0	0		1*	33.3	0	0	0	
Scleral Lenses										
No Stain	26	78.8	1	50	0	0	0	0	2	100
Staining	6	18.2	1	50	1	100	0	0	0	0
Edema	1[x]	3	0		0	0	0	0	0	0

* ond staining.
[x] One af the scleral group refused ta put on contact lenses for check.

Table VI

fitting contact lens. No conclusions can be drawn from the scleral lens group as far as lens fit affecting wearing time.

Corneal staining was correlated with the contact lens fit (Table VI). In the corneal lens group it appeared that there was no relationship between the fit and degree of corneal staining. The small number of poor fitting lenses, however, in both groups made this correlation insignificant.

In Table VII the wearing time was correlated with the reason for securing contact lenses. In the corneal group this correlation was not informative because only six patients wore contact lenses for reasons other than cosmetic. In the scleral group 15 obtained contact lenses for cosmetic reasons with 11 (73.3%) having stopped all use of the lens. Only one patient wore the scleral lens for 4-8 hours a day and a second over eight hours. Of the eight aphakic patients one had stopped wearing the lens, the remainder wore the lenses 4-8 hours a day.

There were seven keratoconus patients with only one patient having partially

Wearing Time Correlated with the Reason for Obtaining Contact Lenses										
Corneal Lenses										
	0 hours		1 hour		1-4 hours		4-8 hours		over 8 hours	
	No. Cases	% Coses	No. Cases	% Cases	Na. Cases	% Coses	Na. Cases	% Coses	No. Coses	% Cases
Cosmetic	3	5.5	3	5.5	10	18.2	15	27.3	24	43.6
Medical										
Keratoconus										
Unilateral Aphakia					1	20	2	40	2	40
High Myopia							1	100		
Occupational										
Scleral Lenses										
Cosmetic	11	73.3	1	6.7	2	13.3	1	6.7	0	0
Medical										
Keratoconus	1	14.3	1	14.3	0		4	57	1	14.3
Unilateral Aphakia	1	12.5					7	87.5	0	
Trichiasis	1	100								
Occupational	2	25	0		3	37.5	3	37.5	0	

Table VII

Comparison of Wearing Time in Patients Who Switched From Scleral to Corneal Lenses			
Patient	Wearing Time With Scleral Lenses	Wearing Time With Corneal Lenses	Satisfied With Corneal Lenses
A	4 hours (maximum)	10 hours (average) 16 hours (maximum)	Yes
B	45 min. (average) 4½ hrs. (maximum)	8 hrs. (average) 15 hrs. (maximum)	Yes
C	2-3 hrs. (maximum)	13 hrs. (average)	Yes
D	0	8 hrs. (average)	Yes
E	0	5 hrs. (average)	No

Table VIII

stopped wearing the lenses. Four patients wore their lenses 4-8 hours and one over eight hours per day. Among the eight patients wearing lenses for athletic purposes two had stopped, three wore the lenses 1-3 hours, and three wore them 4-8 hours a day. It is fairly evident that those patients having a medical or occupational reason for wearing contact lenses are most likely to do so and for a longer period of the day.

There were 5 patients who were dissatisfied with their scleral lenses and elected to try corneal lenses (Table VIII). All five obtained longer wearing time and only one was still not satisfied.

Comparison of Wearing Time to Diameter of Corneal Lens				
	Size of lens in mm.			
Wearing time in hours	9.5	9.8	10.0	10.5
0 hours	1	0	2	0
1 hour	1	0	2	0
1-4 hours	2	1	4	3
4-8 hours	5	1	7	3
over 8 hours	1	1	22	5

Table IX

This was an attempt to ascertain whether the wearing time in the corneal lens group might be influenced by the diameter of the contact lens. While definitely unconclusive there is a suggestion that a larger lens may give the longer wearing time.

Conclusions

Consistent with the literature[1, 2] it is evident that the larger percentage of contact lenses are prescribed for cosmetic purposes and particularly in myopic individuals. In addition this study, also in agreement with others,[1, 2, 3, 4] indicates that the corneal lens patients wear their lenses more consistently, frequently, and experience longer wearing time than the scleral lens patients.

Irrespective of the reason for obtaining contact lenses the majority of patients in each group were satisfied with their lenses. If only those patients who were prescribed contact lenses for cosmetic purposes are considered there was a significantly greater number with the corneal lenses who were satisfied than those with scleral lenses.

Corneal staining (trauma) occurred twice as frequently in the corneal group than the scleral group. This demonstrated that there was significantly more epithelial damage with the corneal lenses. In none of the patients seen in this study was there any permanent corneal damage. The corneal staining usually cleared within 24 hours after discontinuing wear of the lenses.

As has been repeatedly mentioned in the literature[1, 2, 5] patients who have been prescribed contact lenses for a medical or occupational reason are more likely to obtain satisfactory wearing times.

Monocular aphakia is a good indication for contact lenses with anticipation that the majority of the patients will be satis-

fied, experience better vision and not be significantly bothered with diplopia.

Because of the possibility (26% cases) of the corneal lenses becoming dislodged from the eyes, we feel it best to prescribe scleral lenses for athletic purposes. If the athlete is sincere in his intended desires we can feel reasonably assured that he will obtain satisfactory wearing time for the specific use he has requested. This study has shown that 75% of these patients are able to wear their contact lenses considerably over one hour, which is often long enough for the athletes' use at any one time.

For any patient desiring contact lenses for cosmetic use we advise prescribing the corneal type lens. However, the high incidence of corneal staining, even in patients with good fitting lenses, points out to all of us the potential danger of contact lens wear and the need for adequate medical supervision.

Summary

One hundred contact lens patients, 39 scleral and 61 corneal, were interviewed and examined. The two types of lenses were compared in many aspects and conclusions drawn concerning the merits and disadvantages of each.

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Develop Vaccine for Respiratory Ills

Contracts for development of prototype "common cold" vaccines and for clinical evaluation of these vaccines have been awarded by the Public Health Service in an endeavor to make full use of existing information about respiratory tract viruses even as laboratory research continues to uncover new information.

In the new program, small pilot lots of vaccine will first be evaluated for potency and tested for purity and safety. If preliminary trials are successful, controlled evaluation will continue in field trials. Next, larger lots of vaccine will be tested on young adult volunteers from elected military or prison populations and, finally, on civilian populations.

Dr. Justin M. Andrews, director of the National Institute of Allergy and Infectious Diseases, and other scientists cautioned that effective vaccines may take many years to develop, since at least 20 viruses have been identified as important agents of respiratory illness. Known viruses are implicated in about 60% of the serious respiratory illnesses of hospitalized children. These viruses—the parainfluenza viruses, respiratory syncytial viruses, adenoviruses and PPLO-Eaton agent—will receive immediate attention in the vaccine program.

In the United States, respiratory illness causes more time lost from work than any other disease. It is estimated that there are one billion episodes annually and an economic loss of about $5 billion. Preschool children have more than 20 million episodes with fever each year, and pneumonia as a complication is a leading cause of death in young children.—Reprinted from *Public Health Reports*, Vol. 77, No. 9, 1962.

A Case of Veneniferous Venery

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THE PLAINLY DRESSED, demure damsel tripped quietly into the office. Everything about her was sedate and retiring; still, the somberly plain garments could not completely conceal a striking, almost statuesque figure. There was not a trace of make-up on her café au lait skin; an ordinary cloche hat covered luxuriant hair coiled in severe braids. The gait was firm and brisk, the voice low pitched and pleasantly modulated, the smile disarmingly cheerful and the eyes luminously bright. In her low-heeled shoes, Tessie Trull seemed the very epitome of a Girl Scout troop leader.

The young proctologist had referred her to me for a couple of rather specific reasons. Tessie had gone to him directly because of increasing rectal difficulties. Even cursory examination had revealed such extensive lesions that my colleague felt impelled to ask for a complete evaluation. He suspected carcinoma and ulcerative colitis; also, he heard some rales in the chest that puzzled him; he wanted answers.

Intractable Constipation

The card laid on my desk stated her age as 44 (she looked much younger); occupation, housekeeper; marital status, single. As an adolescent, she had had an appendectomy. Her periods were quite regular and had never troubled her. For the last couple of months she had had a persistent cough. However, this prolonged "cold" had not bothered her. A little cough syrup had soothed this symptom.

She considered herself to be in excellent health except for increasingly distressing constipation. Starting some 10 years previously, it had reached almost the stage of obstipation. She admitted having had "boils" and "abscesses" "down there" for more years than she could remember. However, only when defecation had become increasingly more painful and difficult, did

Tessie decide it was time to get medical attention.

Before me lay the penciled notations I had made during my phone conversation with the referring physician who had summarized his data and stated his problem. Preliminary questioning of the patient merely confirmed the already known facts. Tessie Trull was turned over to the nurse who guided her into an examining room where she could be prepared for a complete check.

Above the waist I could not find much of anything except for the scattered rales especially audible at the pulmonary bases; my young colleague had already noted this. Fluoroscopy showed a diffuse haziness that seemed a bit odd as the patient did not have any obvious heart disease, T.B., metastases or any of the usual fungal ailments. The abdomen had the ancient midline laparotomy scar already mentioned. In the inguinal regions were numerous irregular, jagged, white scars that suggested residues of ancient, superficial, eroding ulcerations. Underneath them, in both groins, small, hard nodes were palpable.

The nurse draped the lady for a pelvic examination. Presumably, Tessie had had both a douche and an enema shortly before coming to the office. It was a matter of note that there was a considerable amount of semi-purulent exudate clinging to the parted folds of the labia majora. Sponging off the surplus, several small ulcers came into view. It was automatic to take smears from two of them. Another one was located, most conveniently, on a vestigial tag of the hymen. After putting a drop of procaine into its base, it was easy to snip off the entire lesion and drop the bit of tissue into formalin; only caustic silver nitrate had to be applied to the raw base remaining.

An Uncommon Rite in the Western World!

Without waiting for the confirmation of dawning suspicions, I proceeded to a thorough pelvic examination. For one thing, the clitoris stood up conspicuously, Tessie having been circumcised. While this is a standard puberty rite in many regions of Australasia and Africa, practitioners in New York City do not see this often. Bimanual palpation established immediately the anatomical fact that Tessie Trull had had not only an appendectomy but also a bilateral salpingectomy with a uterine fixation to the anterior abdominal wall. In other words, she must have had the pus tubes, euphemistically dubbed "honeymoon appendicitis," the etiological agent being the gonococcus.

Pausing a moment in my survey, I queried, "Ah, Miss Trull! How old were you when you had this operation for your, um, appendix?"

"Eleven."

"And how old were you when your monthlies started?"

"Oh, a couple of months before that."

My gloved left hand had not been withdrawn. It rested lightly on the patient's perineum preparatory to proceeding with the standard rectovaginal maneuver. Suddenly, I became aware of rhythmic move-



. . . standard puberty rite.

ments by the woman's pelvis; the turgescent clitoris was quivering in rigid erection; in lusty lechery, Tessie Trull actually was masturbating against my hand. There has to be a "first" for almost everything; still, after 30-odd years of practice this bit of brazen, lewd lubricity succeeded in actually startling me. I looked at this unabashed nymphomaniac with sudden clarifying perception.

"Tess, how old were you when you had intercourse for the first time?"

The answer was unadorned and in graphic four-letter Anglo-Saxon.* It was an uncle who deflowered Tessie; it was he who had given her "the whites" for which she had required pelvic surgery. However, Tessie Trull held no grudge against him. With complete candor and searing sincerity, she said:

"I *LIKE* men—especially the real *strong* ones."

While inserting the vaginal speculum, I could not refrain from another question, "Did you say you were a housekeeper? For whom?"

"Well: My girls are the best in town and the syndicate takes care of the police."

Of course. Not every house is a home and so much for history taking by bright young secretaries saving a busy doctor some time. . . .

Careful survey of the vaginal vault revealed several indolent, smallish ulcers; the cervix was relatively clean and of a certainty nulliparous. Rectal inspection revealed old and more recent scarring perirectal sinuses. The perianal lymphatics were greatly dilated; the proctologist had been derailed by that rarity, *lympho*rrhoids, which are never to be confused with the far more common *hemo*rrhoids.

It was next to impossible to insert even one finger into the rectum. The strictures were so tight that one could only be amazed that the woman was still capable of any bowel movement at all. Using local anesthesia copiously and taking much time, it was almost an operation to achieve the eventual success of inserting even one finger into the anus. When the fluid oozing around my probing finger began to be tinged with frank blood, I desisted.

For the nonce, it was enough. Before Tessie left I performed the Frei test. Also, the blood drawn from the vein at her elbow was tagged to be tested not only for syphilis but also for the seldom demanded complement fixation test with lymphopathia venerea antigen. The direct smears were examined for hemophilus ducreyi, the etiological agent of soft chancres. Also, we searched for the Donovan bodies of granuloma inguinale. All these tests bore out my suspicions; the Treponema pallidum we did not snare.

Arrangements were made to have our charming patient admitted to the hospital for major proctological evaluation. I asked the referring surgeon if he could get by with graded rectal dilatation and some relatively minor plastic reconstruction, or would there be the ineluctable necessity of performing an abdominal perineal resection with all the attendant problems of a colostomy.

Rather obviously, we were dealing with a veritable *gamic gamut* of Veneniferous Venery. First, the old G.C. was well burned out and so no continuing problem.

Second, there was the chancroidal infection. This was active; the abundance of Ducrey's Gram negative bacilli seen on the direct smears gave irrefutable proof of this fact; the Ito-Reenstierna test only added the unnecessary extra touch. While some dermatologists consider this venereal affliction to be more common in very hot climates, it *does* occur with some frequency in the temperate zone.

Third, demonstration of the Donovan bodies within the monocytes proved, beyond cavil, the presence of granuloma inguinale. Really, we did not need to do the complement fixation test and indulge in skin testing to confirm the presence of *this* disease.

* See "The Case of The Juvenile Jetsam", *JISMA*, Vol. 53, No. 8, 1960. The literature I have searched makes no mention of this phenomenon which cannot be too uncommon as I have encountered several instances of it myself. The social service workers are welcome to investigate the problem further. It is my belief that it is associated with certain aspects of voodooism.

A Colostomy Avoided

Actually, however, our intriguing patient was suffering the real damage from a fourth disease, *lymphogranuloma venereum*. It was this condition that had produced the inguinal adenitis resulting in that, at first, puzzling, superficial scarring. Also, the involvement of the femoral lymphatics had yielded the "sign of the groove" so confusing to one unfamiliar with its somewhat esoteric appearance. It was the large virus of this disease that was responsible for the perianal abscesses producing the disabling rectal strictures. While this virus has close antigenic relationships with the psittacosis (more properly called ornithosis) group, it is disseminated by promiscuous sexual contact. In women, this virus is inoculated into the upper portion of the vagina and then spread by direct extension into the pelvic lymphatics. It is this often forgotten bit of epidemiology that had led my proctologist friend astray.

The Frei test was proven positive as was the complement fixation test. The reversal of the A/G and the slight hyperglobulinemia were further proof of the activity of this disease.

Fifth and finally, there was the by now almost trite problem of syphilis. We had not really expected to see the Treponema pallidum on dark field examination; after all, there were no primary or secondary lesions to be discerned. However, the VDRL was strongly positive and the Kolmer was 4 plus. X-rays of the chest also gave some new aspects to those unusual rales. The roentgenologist was willing to label that peculiar haze (among other things) as, "possibly gummatous." Admittedly, we are not talking of the white pneumonia seen in the syphilis of the newborn. Granted also that gummatous involvement of the adult lungs is such a rarity nowadays as to be a clinical curiosity.

We did *not* do a lung biopsy; I'll even make the cheerful concession of allowing that my thinking just could have been colored by my rapidly expanding knowledge of the patient. However, the patient had many fewer symptoms than the signs seemed to demand. The well documented indolence of the lesions of syphilitic angiitis explains most adequately the presenting clinical syndrome. Energetic antiluetic therapy DID clear that chest picture at just about the expected tempo!

Along with the modern antiluetic and antivenereological battery of medications, the proctologist and I did some judicious rectal stretching, repeated painstaking incision and drainage of the pelvic abscesses. The barium enema indicated a normal colon above the last foot of the bowel. For a while, it seemed touch and go but a colostomy was averted.

The spinal fluid was absolutely normal; all the electrolyte studies of the blood were quite excellent; there were no other abnormalities possessed by the patient's various



body fluids. The concupiscent quintet of venereal diseases Tessie Trull had in abundant measure; otherwise, she was an outstandingly healthy specimen much younger physically than her stated age.

Once More a Healthy Housekeeper!

Within two weeks, Tessie made a glowingly healthy departure from the hospital. The demure damsel tripped daintily out of the front door. My British resident and I observed her sallying forth; somehow or other, however, the comparison with the Girl Scout troop leader did *not* come to mind. In fact, my learned Cambridge scholar murmured a ribald tag of Latin—I think, a paraphrase from Sappho, the renowned poetess from the isle of Lesbos; it was this literate queen who gave the name of her home island to Lesbianism, female homosexualism. I gave him some slight pause by reciting the English verse I had learned when initiated into a fraternity:

"King Solomon and King David led merry,
merry lives;
With many, many lady friends and many,
many wives;
But, when old age crept up on them,
With many, many qualms
King Solomon wrote the Proverbs,
And King David wrote the Psalms!"

Which frater wrote this doggerel? I really don't know or much care. My young friend thought that Tessie would be fluttering many dovecotes that very day. "The doves would not be Picasso's?" "O, no! I mean Ishtar's. The mother of Ninas, the builder of ancient Nineveh. The old girl is better known as that sensuous, stuprative Queen Semiramis."

Unfortunately, the intercom was paging him and my refresher on the exotic cult came to an abrupt end; it was just as well. ◄

1270 Fifth Ave.
New York

Schistosomiasis on Increase

Dr. Gerald M. Berkowitz of Northwestern University Medical School alerts physicians to the spread of a disease long unknown in the U.S., but arriving here in the past decade with immigrants from the West Indies.

Since 1933, 10 cases of schistosomiasis—a parasitic, snailborn disease of the intestinal system—have been treated in Chicago's V.A. Research Hospital alone. Nine of these patients were immigrant Puerto Ricans who were infected before arriving here. The other man acquired the disease while a prisoner-of-war in the Philippines. Another series was reported to Cook County (Chicago) hospital in the same period.

The disease has long been considered to be so rare that it could be ruled out of diagnosis, but the Northwestern gastroenterologist said that "it should be suspected in persons from endemic areas, even in the absence of symptoms."—Reprinted from *The New Physician,* August, 1962.

Electrocardiogram of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Robert M. Moore Heart Clinic of the Marion County General Hospital, Indianapolis.

Paroxysmal Atrial Tachycardia With Block

*CHARLES FISCH, M.D.**
Indianapolis

PAROXYSMAL atrial tachycardia (P.A.T.) with block is a relatively common arrhythmia, most often indicative of rather severe organic heart disease. In about 50%, the origin of the P.A.T. can be traced to digitalis intoxication. In the latter group potassium seems to be the therapy of choice.

The tracings (lead V-1) reproduced in Figure I were obtained on a 70-year-old man with rather severe coronary heart disease. The arrhythmia was traced to digitalis overdosage. The top strip (9:30) represents P.A.T. with a 2:1 block. The atrial and ventricular rates are 210 and 105 respectively. The R-P interval of the nonconducted P waves is (measured from beginning of the QRS to the negative part of the P wave) .14 seconds.

After administration of 45 mEq of K intravenously, the atrial rate was reduced to 160 with a changing 2:1 and 1:1 response. The R-P of some of the conducted P waves is now shorter than .14 seconds. In the third strip (10:00) the atrial rate remains at 160 but with a 1:1 response and a P-R of 0.30. It is of interest to note that the R-P is now .08, suggesting "improvement" of conduction or perhaps the presence of supernormal conduction. The bottom strip (10:40) represents sinus rhythm with a rate of 112, a 1:1 response and a P-R of .16 seconds.

* From the Robert M. Moore Heart Clinic, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

Supported by the Herman C. Krannert Fund of the Indiana Heart Association and the Indiana State Board of Health, Indianapolis.

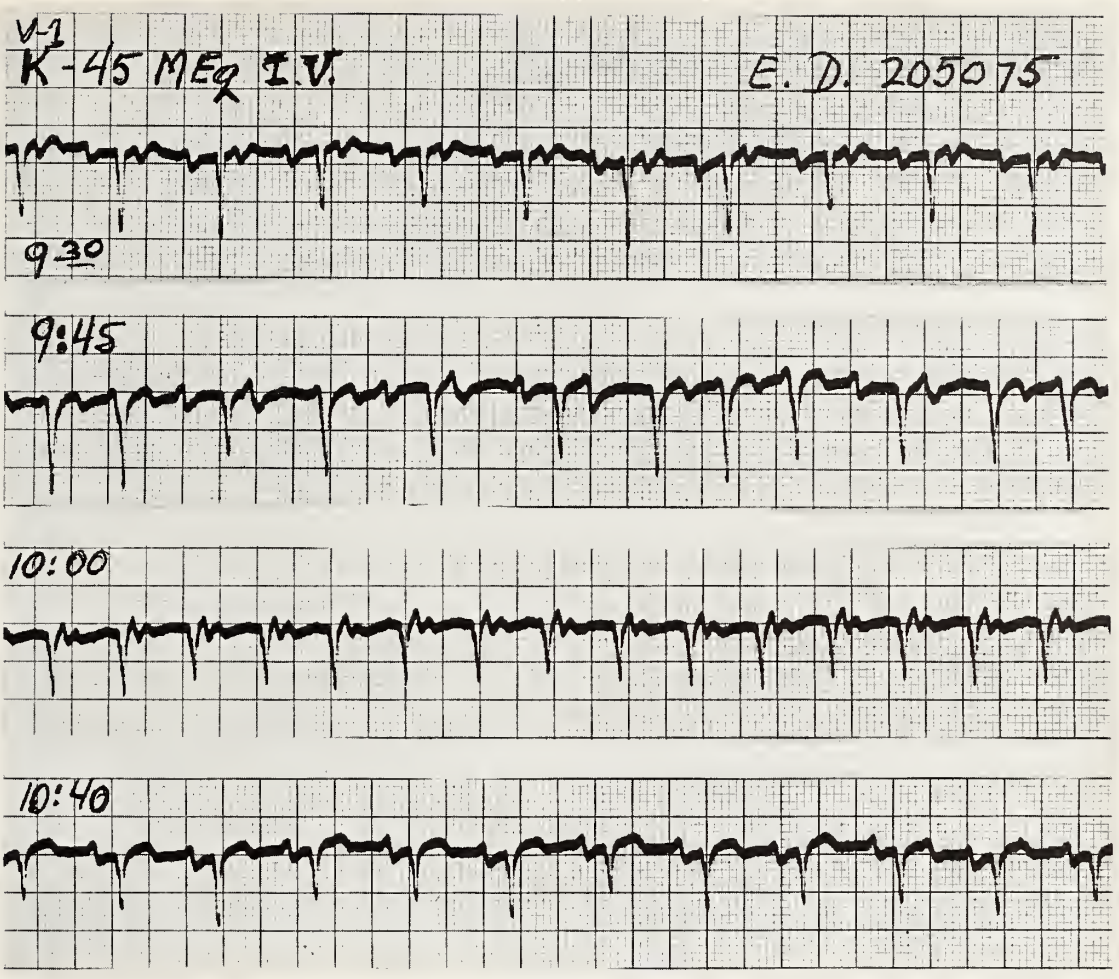


FIGURE 1

PAROXYSMAL atrial tachycardia treated with potassium (for details see text).

LABORATORY MEDICINE

Published periodically as a review of clinical laboratory procedures suitable for laboratories with minimal equipment.

Blood Typing

A. WENDELL MUSSER, M.D.*

LANDSTEINER in 1900 found that the plasma of one sample of human blood clumped the red cells of another. The clumping (agglutination) was the result of interaction of antigens in the red cells and antibodies in the plasma. Studying these reactions allowed Landsteiner to separate human blood into four different groups—the classical A, B, AB, and O groups. These groups were the only blood groups known for many years. Since 1940 many blood groups have been discovered. Recent advances have led us to believe that each individual is probably an individual immunohematological animal.

The four blood groups are determined on the basis of the antigens in the red cells. These antigens are the expression of three allelic genes, O and the dominant A and B. Six genotypes occur: OO, AO, AA, BO, BB, AB; however, only four phenotypes can be recognized on serological grounds. Each blood has the reciprocal antibody in the plasma. These antibodies are the source of the typing sera used in typing human blood. (Figure I). The antigen make-up of the blood is constant throughout life although many times newly born infants display rather weak reactions.

Antibodies begin to be produced at some time between the third and sixth month after birth. The titer increases slowly and then decreases as adult life is reached. Certain variations in antibody titers are known. Anti-A titers are higher than anti-B, and the anti-A titer of a group O individual is usually higher than that in a group B. When a saline test environment is used, naturally occurring anti-A and anti-B react with optimum reactivity at room temperature. The immune forms of anti-A and anti-B react best at 37° C in a protein medium, serum.

In testing an individual's blood group it is imperative that the glassware used is scrupulously clean. Many commercial typing sera are available; however, care should be taken that a typing serum with reliable and predictable reactions be used. The blood type is, in these modern days of immunohematology, a useful and important medical tool as well as another signpost pointing out the individuality of the human animal. The slide grouping method is an easy and reliable method.

Method

Mark the left side of a clean glass slide anti-A and the right side anti-B. Add to the left side a drop of anti-A grouping serum and to the right side a drop of anti-B grouping serum. Puncture the soft pad of a finger in the usual manner. Next to the drops of anti-A serum and anti-B serum add one drop of blood. Be careful not to

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Group	Antigens in Red Cells	Antibodies in Plasma	Incidence — U.S. — Percent		
			Whites	Negroes	Chinese
O	None	Anti-A, Anti-B	45	48	36
A	A	Anti-B	41	27	28
B	B	Anti-A	10	21	23
AB	A & B	None	4	4	13

cause confluence of the drops on the left and right sides of the slide.

With one half of an applicator stick mix the red cells with the anti-A serum, and with the other half mix the red cells with the anti-B serum. Gently rock the slide back and forth and observe the mixture for one minute unless agglutination occurs earlier. Agglutination of the anti-A side and not the anti-B denotes group A blood; anti-B and not anti-A, group B; both sides, AB and neither side, group O. It is necessary to confirm the slide grouping by testing the unknown serum with the known red cells of groups A, B, and O.

In a similar manner, Rh typing of blood may be undertaken. The Rh system is extremely complex, and six antigens are included, CDEcde. Fortunately it has become clear that a simple sub-division of human beings into Rh positive and Rh negative, according to their reactions with a single anti-Rh serum (anti-D), is sufficient for routine clinical purposes. Many occasions arise, however, where C and E become extremely important—e.g., sensitized pregnant women. Anti-CDE serum is readily available. The complexity of the Rh system does not lend itself well to a brief concise discussion.

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The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

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Hepatitis Decline Is Spotty

INFECTIOUS HEPATITIS continues to be a public health problem of considerable importance. It was first reported nationwide in 1952 and since then has gone through two peaks of incidence. It is thought to be going into a period of decline this year.

Cases in the ten years reported have varied from 14,922 in 1957 to 72,557 in 1961. Cases are being tabulated this year at a rate 27% below that of 1961 and stand at 41,000 in the first 38 weeks.

The decline in incidence this year is spotty. While the national trend is down by 27%, the states vary from a plus 438% in Maine to a minus 86% in Nevada, as announced in the Statistical Bulletin of the Metropolitan Life Insurance Company. Indiana is enjoying a change of 47% down from last year.

While the incidence of the disease varies so sharply from year to year and from state to state, the most interesting variation occurs in the mortality rate. Each year since 1952 has recorded deaths in numbers ranging only from 794 to 897; the absolute number of deaths has been remarkably constant. With the changeable incidence of the disease the death rate has fluctuated markedly from one death in 17 cases in 1957 to one death in 82 cases in 1961.

The annual death rate in relation to the total population has remained unchanged during the decade—0.5 per 100,000 population. When analyzed in relation to sex and color there is a slight difference, but below the age of 45 the four sex-color groups have approximately the same rates, all of them below 0.5. In the group from 65 to 74 years of age the rate is 1.2 and at ages 75 to 84 it is still higher at 3.3.

There are some cases of infectious hepatitis such as those without clinical jaundice which are not reported. Undoubtedly there are other cases which, for one reason or another, are not represented in the official totals. The disease, therefore, is more widespread than would be indicated by the statistics. And even on the basis of the reported cases, the incidence of infectious hepatitis is 15 times that of diphtheria, poliomyelitis, typhoid fever and infectious encephalitis combined.

Besides a significant though variable

mortality rate, the morbidity of the disease is sufficient to make it of considerable importance from an economic viewpoint. It is characterized by a prolonged convalescence, and has been suspected of causing some residual damage to the liver—especially in the more severe survivable cases. It is regrettable that so little is known of the epidemiology and prevention of infectious hepatitis.

Emergency Room Traffic Jam

HOSPITAL EMERGENCY room management and organization are covered in a recent publication developed by the American Hospital Association and the American College of Surgeons and published by the Hospital Association.

The new book is titled "The Emergency Department in the Hospital: A Guide to Organization and Management." It covers the subjects of equipment, staff and management, and attempts to enunciate the principles under which the planning and operation of the emergency facilities should be determined, in order that each facility may be tailored to fit the community needs.

The publication is occasioned by the phenomenal and unprecedented increase in the number and type of patients who present themselves or are transported unannounced to the emergency departments of practically all voluntary hospitals. During the past 15 years the development of emergency room traffic has been so fast that only those who are closely associated with the problem have an accurate comprehension of the size of the problem.

A relatively short visit to the emergency room of any good-sized hospital, especially during the hours after 7 p.m., is enough to remind the doctor of General Custer's rhetorical question on his last day—"Where did all these Indians come from?" As pointed out in the Guide—these patients include, in addition to the injured and acutely ill, "those suffering from any condition considered by either the patient or his physician to require immediate attention."

Whether the dramatic increase in emergency hospital patients is due to the fact that patients are coming to realize that the hospital is usually better equipped in a physical way to care for them than is the doctor's office; whether the hospital attracts patients because it is more accessible; whether its around-the-clock staffing is an advantage over the doctor's office or whether the hospital attracts patients who do not already have or cannot obtain on short notice their own physician makes no difference in solving the problem. Probably all these and many other factors are responsible. Regardless of the underlying causes, the problem is here and must be solved.

Proper operation of the emergency department depends on the cooperation of the hospital and the medical staff. The hospital furnishes the physical facilities, equipment and nursing component; the staff furnishes the physician component.

The most difficult of all the problems is the physician staffing. The guide outlines the various methods which have been used to assure adequate 24 hour coverage. It discusses the principles upon which a clinical procedures manual may be drawn up. It covers also the legal implications of emergency treatment and the relationship of the department with the police, press and other public agencies.

The book may be obtained from the American Hospital Association at a cost of $1.00 per copy.

The Blood Pressure "Elevator"

BLOOD PRESSURE, its variations, its related conditions and its effect on longevity are discussed in an illustrated booklet published by the Metropolitan Life Insurance Company. The material has been partially published by *Modern Medicine,* and

the charts were a part of a scientific exhibit at the June, 1961, AMA meeting.

The study confirms the findings of earlier investigations. It is of special interest and subject to a high degree of credibility since it is based on the records of 26 life insurance companies and covers nearly 4,000,000 persons accepted for life insurance at standard rates. In the words of the medical director of Metropolitan, "the study removes any doubt that even relatively modest elevation of blood pressure has long-range effects on longevity."

Average blood pressure increases slowly with age. Both systolic and diastolic pressures are a little lower in females at age 15 and increase faster than in males until the age of 45 at which stage the two lines cross. For females the rise from 45 to 60 is a little steeper than for males. However, elevated blood pressure in women is of less significance than in men.

For both men and women of average height there is a gradual increase in both systolic and diastolic pressures with each increment of weight and at each of the decades of age between 30 and 60. This trend applies to persons of other height classes and to weights below and above those illustrated in the charts.

An interesting feature of the analysis is that which tabulates the percentage of persons who were issued standard insurance while carrying slightly elevated pressures. At 140/90 or more 5% of men in the fourth decade and 28% of men in the seventh decade were insured without rating. For women the comparable figures were 3% and 35%.

At 150/100 or more 0.4% of men in the fourth decade and 5.1% in the seventh, and 0.2% of women in the fourth and 6.4% in the seventh were insured at standard rates.

Reduction in life expectancy associated with elevated blood pressure is well illustrated by plotting the life expectancy according to the level of blood pressure at the initial examination. There is a demonstrable reduction in expectancy demonstrable for men who were insured at age 35 with a blood pressure of 130/90. In terms of life insurance life expectancy, the normal blood pressure for a man at age 35 is somewhere below 130/90.

One of the implications listed is that arbitrary assumptions as to figures representing normal blood pressures or formulas for estimating them are not justifiable.

Another of the implications for clinical medicine is that moderate elevation of blood pressure, especially in men under 50, implies a distinct probability of eventual development of hypertensive disease. "Insurance experience would indicate that attention should be paid to blood pressure as low as 140 mm. systolic and 90 mm. diastolic."

"Early evidence of hypertensive disease calls for suitable measures to promote and conserve the patient's health, with weight control an important consideration."

The booklet is entitled "Blood Pressure —Insurance Experience and Its Implications." It may be obtained by writing Metropolitan at 1 Madison Ave., New York City.

Editorial Notes . . .

Southwestern American Indians have gallstones more than three times as often as the general population, 32% as compared with 9%. The Phoenix Public Health Service Indian Hospital finds that Indians have diabetes more often and attribute this as one of the causes of gallstones. The Indians also have more gastrointestinal infections and, except for the Navajo and Apache, suffer more from obesity than does the white race. Another item of interest, as reported in the *JAMA*, is that while the ratio of females to males with gallstones is less than three to one among Caucasians, it is seven to one in Pima Indians and six to one in all the southwest tribes together.

Multiparas with more than four children are just as likely to develop complications, even though they are young, as are

primiparas over the age of 35. Dr. S. J. Behrman, of the University of Michigan, in an address before the American College of Obstetricians and Gynecologists in Indianapolis, found that complications were twice normal when the mother was over 35, or when she had had four babies. He said, "The 26 or 27-year-old mother with her fifth or sixth pregnancy may present as many problems, if not more, than the 35 or 40-year-old primipara."

Prolonged pregnancy is terminated more safely by spontaneous labor than by drug induction or caesarean section. Dr. Tommy N. Evans, Ann Arbor, reported his experiences in the delivery and care of "late babies" to the American College of Obstetricians and Gynecologists in Indianapolis. He found that there were very few risks connected with postmaturity and said that prematurity was a much greater hazard. He said there was no significant difference in mortality rates of newborns due to prolonged gestation.

Sixty-five top medical educators recently met for two days in Kansas City for an American Academy of General Practice conference on graduate training. Object was to work out a suitable program of training to prepare young doctors for the specialty of family practice. Dr. Francis Land of Fort Wayne is chairman of the AAGP Commission on Education and had a prominent role in the discussions. Four operating programs, requiring either two or three years for completion and varying in content as to intern and residency level training were reviewed.

Reynolds Metal Company is manufacturing a new water-soluble plastic laundry bag designed to minimize the spread of pathogenic bacteria in hospitals and elsewhere. The bags on test have reduced the airborne bacteria by as much as 92% as compared with loose handling and as much as 79% as compared with a cotton bag system. The bags, after being filled with soiled linens, are transported to the laundry and placed in the washing machines without removing the contents. Linens with an ordinary amount of moisture do not disrupt the bags. The soluble material which constitutes the bags has not interfered with the action of the machines, with the cleansing of the linens, nor with the sewerage system. The bags may also be used for storing and transporting clean linens and when so used have been found to maintain linens with much less bacterial contamination than is possible with the loose handling system.

The attorney general of the state of Ohio has ruled that "when a hospital, in connection with the operation of an emergency room, charges a fee for the professional services of a licensed physician and said physician is paid a salary by the hospital for his services, such hospital is engaged in the unlawful practice of medicine." The opinion also pointed out that such an arrangement, due to the division of professional fees, would make the physician guilty of grossly unprofessional and dishonest conduct contrary to the Medical Practice Act of Ohio. It was also emphasized that a hospital could maintain an emergency room and could, as a charity, make available the services of a licensed physician in connection with such room.

The principles for planning for nuclear disaster by hospitals and medical personnel are discussed in a recent issue of Hospitals by Col. Kadrovach of the Army Medical Service. He stressed that all planning should be on a coordinated basis, and that, as is the case in Indiana, a single administrator should take charge of all medical resources. After the state plan is finished, the individual plans for all communities should be worked out. Damage to a bombed area will be so great that use of hospitals and personnel in the area should be discounted and not depended upon. Each locality should plan, not to help itself, but to render aid to adjacent areas if not damaged itself. All disaster medical stations should be planned for the periphery of a possible target area, should be previously equipped, and each medical person should have an assignment at one or two of these stations. Casualty

sorting will be a major task for physicians, in order that scarce medical resources will not be used up in caring for minor injuries.

A little appreciated and generally ignored fact in public health is that the southwestern portion of the United States is infested with large numbers of mosquitoes of the Aedes aegypti type. They are capable of becoming the vectors of yellow fever on a large scale if a human case of yellow fever ever becomes available to infect the mosquitoes. In the days of slow transportation, a human being might contract yellow fever in a foreign territory but would be diagnosed and quarantined before entering the United States. With fast transportation, people may be infected with yellow fever in a foreign land, fly into the United States, develop the disease and infect mosquitoes before a diagnosis is made. Such a succession of events may be improbable but its slight possibility makes the threat of a yellow fever epidemic a real one for the U. S. Elimination of the throng of uninfected Aedes aegypti in our country is the answer.

A nursing home inventory on a national scale has just been completed for the second time by the Public Health Service. Since 1954, skilled nursing care homes have increased by 39% in number and the bed capacity has almost doubled. Nursing homes are classified as skilled nursing care homes, of which there are 9,700; personal care homes numbering 11,100 and residential care facilities totaling 2,200. Indiana is reported as having 409 nursing homes with 9,845 beds. In the number of skilled nursing care beds, Indiana is above the national average with 2.1 beds per 1,000 population versus a national average of 1.9 beds per 1,000.

The latest tally of approved medical schools shows the total to be 87. Most recent additions are the University of Kentucky College of Medicine at Lexington and the California College of Medicine which was formerly the College of Osteopathic Physicians and Surgeons. Around 10 or 12 more schools are being planned. Five universities—Brown, Rutgers, Connecticut, New Mexico and Texas are in the planning stage. Medical students enrolled in the 1961-62 school year set a new record for numbers—31,078. This represents an increase of 790 over the previous year—the largest yearly increase since 1951.

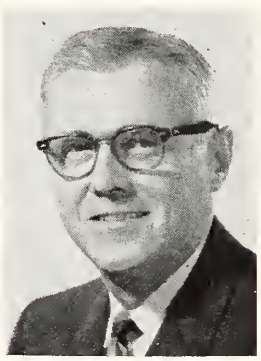
The custom of treating welfare cases as usual and not accepting government payments is being adopted by individual physicians in many parts of the country. Dr. Clarence Martin of Medina, North Dakota, recently announced his intention of adopting such a policy and urged welfare patients to continue to see him. He assured them the same care they had been receiving. He emphasized that he charged reasonable fees based on the ability of the patient to pay and that for welfare cases there would be no fee. His statement in part was "It stands to reason that when I give you a dollar it costs me only that dollar. But, if I let the govenment do it for me, it costs me $3.00, plus my freedom by being dictated to as to how, where, what and how much I dare do . . . plus my time, and it often takes four times as much time for paper work as the time I spend with patients. . . . Probably the greatest sabotage is that of the human emotion. It takes away the joy of helping someone."

The Coggeshall Commission on Drug Safety has selected Duke C. Trexler, Jr. of Chicago as executive director. Mr. Trexler has been a field director of The People to People Health Foundation (Project HOPE) since 1961. The Commission on Drug Safety, with Dr. Lowell Coggeshall as Chairman, was formed last summer by the Pharmaceutical Manufacturer's Association to develop new knowledge of human reactions to drugs and help assure increased safety in drug development and testing procedures. A major goal of the commission is to stimulate activities that will provide new knowledge and better exchange of vital scientific information. ◄

President's Page

AMA INTERIM MEETING

As a state officer I have attended the last four meetings of the House of Delegates of the AMA. The multitude and scope of matters under consideration has been quite impressive. The delegates have uniformly been highly dedicated and devoted members of the AMA who work long hours to conduct the affairs of our organization. Considerable self sacrifice is demanded of these men as many hours are required to perform their duties. They have little or no time to attend the scientific programs. Very little time is available for recreation and social activities. We owe a deep debt of gratitude to these men.



I have been equally impressed with the high caliber of our officers and the members of the Board of Trustees. These men have the duty and obligation of considering most of the matters referred to the House of Delegates as well as lesser matters and the day to day operation of the many activities of the AMA. I am sure that none can question their motivation or intent. They must spend even more days and hours than the delegates in the performance of their duties. Their only reward can come in the satisfaction of a job well done.

One of the great difficulties in our profession is that of communication. It has been stated many times by our leaders that many of our difficulties would be solved if the membership could have the knowledge of our Board of Trustees to form their opinions. Conversely, it appears to me that it would be most helpful if it were possible for the individual member to communicate his views to the Board of Trustees. These men become so involved in their serious attention to the problems of our organization that I feel they do not have the time to ascertain the feelings of the membership. It becomes a matter where they only communicate with one another and higher authorities similar to the saying "The Lodges speak only to the Cabots, and the Cabots speak only to God."

A case in point is the present controversy regarding the number of members of the Board of Trustees and their term of office. It was quite apparent at the June Meeting in Chicago that the majority of the members of the House of Delegates favored increasing the number of members of the Board and limiting the term of office from five years to three years. Yet it is surprising that the present members of the Board continue to oppose the will of the majority, and the Judicial Council chose at the recent meeting to rule against the expressed will of the majority of membership. It seems that we have here a failure of communication from the ground up, and a lack of responsiveness on the part of the Board.

Leadership is important, but once the will of the majority becomes apparent, wise leadership will become aware of this and accede to the wishes of the majority. It is hoped that the members of the Board and the officers will become more responsive to the membership. Then we will have a truly democratic organization of which we can all be proud.

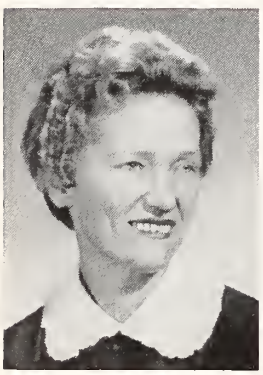
Maurice E. Stocke

The Woman's Auxiliary

REPORTS TO ISMA

With the busy rush of the holidays behind us, it is time to re-assess our activities, re-evaluate our achievements, and look toward the goals we have set; not only as individuals but as an organized group of doctor's wives. Our goals are to promote friendly relations and mutual understanding among physicians' families, to promote health, and to assist the medical society in its endeavors.

Most certainly the doctor's wife is a health conscious individual, and many of her myriad community activities are closely related to, if not directly associated with, the health needs of her community. In working together, auxiliary members get to know one another, to understand each other's obligations and problems, and certainly to appreciate each other's efforts and attainments. We sincerely hope we are measuring up to the expectations of the medical society in cooperating with their endeavors.



Looking back, the sale of Christmas cards has netted us a tidy sum for AMA-ERF, and at least two constituent auxiliaries have had special fund raising parties. Looking ahead, there are some outstanding projects this month for the benefit of AMA-ERF. The Marion County Auxiliary is sponsoring "The Sound of Music" at the Murat on January 23rd; Bartholomew-Brown County Auxiliary is having a white elephant sale, and Clark County is planning a luncheon.

In the field of Health Careers, over 50 scholarships were awarded last fall. Looking ahead, the Delaware County Auxiliary has started Future Nurses Clubs in the Muncie High Schools and Marion County Auxiliary placed a Health Careers Guide book in each of the counties' public, private and parochial high schools.

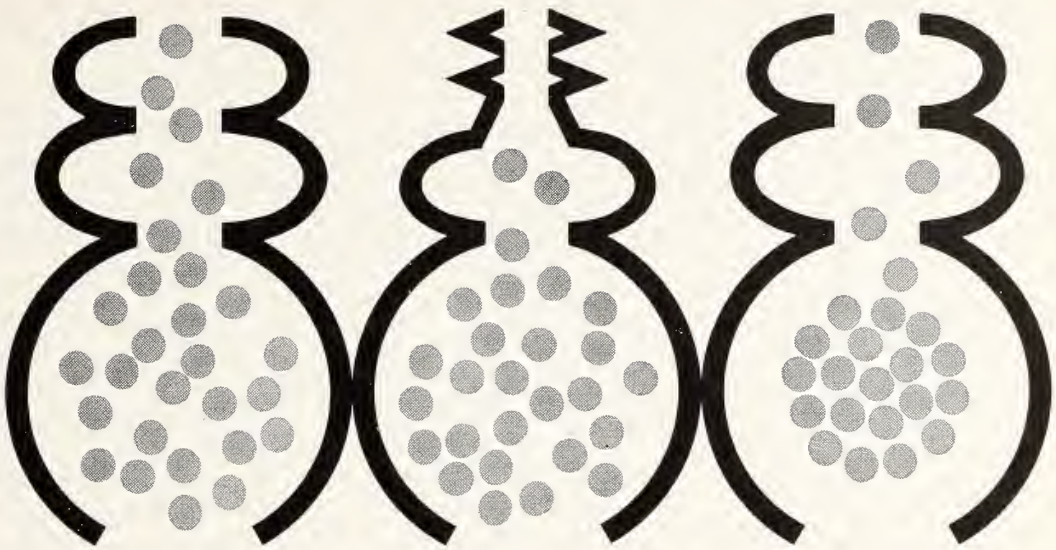
So many gave so much at election time to work as good citizens, and we hope to work with the chosen representatives in attaining maximum health and the best medicine possible for this freedom-loving country.

Looking back, either Mrs. Horswell or one of her representatives visited each of our state mental institutions last fall. Hundreds of Christmas gifts for patients and money were sent to those institutions, and several parties were planned by constituent auxiliaries for patients in our mental hospitals.

Looking back, the IHA Committee was formed only last summer, and already several carloads of medical equipment and sample drugs have either gone to World Medical Relief in Detroit, or are now being stored in the Broadway Methodist Church gym awaiting shipment. Looking forward, we know there will be more, and at least two auxiliary groups meet periodically to convert old shirts into hospital gowns—all this for medical missions.

I wish I could quote some figures, but at this time I can only say we are working together, and together we hope it will add up to a year in which it can be said of the auxiliary, "they served."

Mary Johnson



lowers motility | relieves cramping | stops diarrhea

LOMOTIL® Antidiarrheal tablets and liquid

(brand of diphenoxylate hydrochloride with atropine sulfate)

Traditionally the most effective means of slowing excess intestinal motility in diarrhea and so of relieving the disorder have been the opium derivatives. Now Lomotil makes available an antidiarrheal agent[1] of greater therapeutic efficiency than morphine.

By controlling hypermotility, the basic mechanical dysfunction of diarrhea, Lomotil reduces the frequency and fluidity of stools, diminishes cramping and controls diarrhea in many patients in whom other drugs have proved inadequate.

In a recent clinical report Cayer and Sohmer[2] state: "The alleviation of symptoms [with Lomotil] was usually prompt, occurring within 24 to 72 hours even in the long-standing chronic cases. . . . A surprisingly satisfactory response was obtained in 75 per cent of the patients with regional enteritis and in 63 per cent of those with ulcerative colitis, all of whom had failed to respond to other measures."

The high therapeutic efficiency of Lomotil, its safety, convenience and economy may be used to advantage in acute or chronic diarrhea.

Dosage: For *adults* the recommended initial dosage is two tablets (2.5 mg. each) three or four times daily. Maintenance dosage may be as low as two tablets daily.

Lomotil is supplied as unscored, uncoated white tablets of 2.5 mg. and as liquid containing 2.5 mg. in each 5 cc. A subtherapeutic amount of atropine sulfate (0.025 mg.) is added to each tablet and each 5 cc. of the liquid to discourage deliberate overdosage. Recommended dosage schedules should not be exceeded.

Note: Lomotil is an exempt preparation under Federal narcotic statutes.

Detailed information and directions for use in children and adults are available in Physicians' Product Brochure No. 81. G. D. Searle & Co., P. O. Box 5110, Chicago 80, Illinois.

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G. D. SEARLE & CO. *Research in the Service of Medicine*

Speech given before the Indiana State Medical Association 113th annual convention, French Lick, Oct. 9, 1962.

Law for the Good Samaritan

JAMES A. EMMERT, LL.B.
Shelbyville, Indiana

WHEN THE LAW gets into the field of moral duties and considers whether the interests of society in general are strong enough to make moral duties also legal duties, the medical profession properly becomes gravely interested. It is within the power of those who make the law, either in the courts or in the legislatures, to add to the professional obligations and duties of those engaged in the practice of medicine. Once a duty is created, then the breach of that duty can result in unpleasant consequences for any doctor who may be charged with violation of the duty.

The law quite clearly holds there can be no cause of action for negligence unless there is a breach of a duty.* Some of these duties have been defined and laid down by courts, and more and more often, the legislatures prescribe duties of conduct which, when violated, bring about a cause of action for damages for the breach.

There can be no cause of action for any alleged malpractice without a breach of a legal duty. The action could be based upon the breach of the implied promise of the contract to use due care, but generally is based upon the requirement of all who act that they must use due care in whatever they do.

It is most interesting that the ancient parable of the Good Samaritan furnishes the justification for converting moral duties into legal duties. The priest and the Levite had the moral duty to help the traveler who had been robbed and left half dead. For many years the common law, made by the decided cases, held there was no legal duty on anyone to be a good Samaritan. In Indiana our Supreme Court held in *Hurley v. Eddingfield* (1901), 156 Ind. 416, 59 N. E. 1058, 53 L.R.A. 135, that a regular physician who had a patient who was dangerously ill, was under no legal duty to care for him even if no other doctor could be obtained and the patient died for want of such care.

Not Legally Safe

In view of the changing sentiments on what should be the law, if a strong moral duty to act be present, it would hardly be safe for a doctor to rely upon this precedent. There have been many eminent legal scholars and professors who disagreed with the old common law rule that man is his brother's keeper. Perhaps a case for

* "Actionable negligence has three essential elements: (1) a duty imposed by law to do or not to do a certain act; (2) a violation of that duty by an act or omission to act which constitutes a breach of that duty; and (3) injury proximately caused by such breach of duty."—*Budkiewicz v. Elgin, Joliet and Eastern Ry. Co.* (1958), 238 Ind. 535, 540.

putting a legal duty on the priest and Levite to help the victim of the robbery is stated best by Professor Prosser in his treatise on the Law of Torts:

"Because of this reluctance to countenance 'nonfeasance' as a basis of liability, the law has not recognized the moral obligation of common decency, to assist another human being who is in danger. The expert swimmer, with a boat at hand, who sees another drowning before his eyes, may sit on the dock, smoke his cigarette, and watch him drown.

"A physician is under no duty to answer the call of one who is dying and might be saved, nor is anyone required to play the part of a good Samaritan and bind up the wounds of a stranger who is bleeding to death, or to remove a stone from the highway where it is a menace to traffic, or even to cry a warning to one who is walking into the jaws of a dangerous machine. The remedy in such cases is left to the 'higher law' and the 'voice of conscience,' which in a wicked world, would seem to be singularly ineffective either to prevent the harm or to compensate the victim.

"Such decisions are revolting to any moral sense. They have been denounced with vigor by legal writers. Thus far the difficulties of setting any standards of unselfish service to fellow men, and of making any workable rule to cover possible situations where fifty people might fail to rescue one, has limited any tendency to depart from the rule to cases where some special relation between the parties has been considered to create a duty. Thus a carrier has been required to take reasonable steps to aid a passenger in peril, an employer his employee injured in the course of his employment, a ship its seaman who has fallen overboard, and a department store its invitee. The 'implied contract' which these cases sometimes profess to find appears to be the merest cloak for the obligation of common humanity.

"It also is recognized that if the defendant's own negligence has been responsible for the plaintiff's situation, a relation has arisen which imposes a duty to make a reasonable effort to give assistance, and avoid any further harm. Where the original danger is created by innocent conduct, involving no fault on the part of the defendant, it was formerly the rule that no such duty arose; but this appears to have given way, in recent decisions, to a recognition of the obligation where there was no original fault.

"In a few states 'hit and run driver' statutes have been construed to result in civil liability for failure to stop and aid a person injured in an automobile accident, and a California case suggests that the duty may exist at common law. This process of extension has been slow, and marked with extreme caution; but there is reason to think that it may continue until it approaches a general holding that the mere knowledge of serious peril, threatening death or great bodily harm to another, which an identified defendant might avoid with little inconvenience, creates a sufficient relation, recognized by every moral and social standard, to impose a duty of action." —Prosser, *Torts* (1955) S. 38, pp. 184, 185.

The Indiana "hit and run" statute now requires a driver to stop and give reasonable aid. It states:

"The driver of any vehicle involved in an accident resulting in injury to or death of any person or damage to any vehicle which is driven or attended by any person shall give his name, address, and the registration number of the vehicle he is driving and shall upon request exhibit his driving license to the person struck or to the driver or occupant of, or person attending any vehicle collided with, and shall determine the need of and render to any person injured in such accident reasonable assistance, including the removal or the making of arrangements for the removal of such person to a physician, surgeon, or hospital for medical or surgical treatment."

§ 47-1912, Burns R.S. 1952 Repl., Supp.

The aid or assistance required, as in the Indiana Statute, is often limited to "reasonable assistance." A material part of the

Pennsylvania and California statutes are set forth in the footnote.*

Limited Liability Imperative

Naturally, a doctor who is on the public highway at once wonders if he is going to increase his risk of being subjected to a malpractice suit if the law makes him be a good Samaritan. It would seem to be a mere matter of fairness to the doctor if we are going to require him to care for any one he finds along the highway that is the victim of an accident that protection be afforded him for being a good Samaritan. A limitation in the statute requiring reasonable aid and assistance will hardly give the protection the medical profession should enjoy.

It is not surprising to find a number of states have enacted legislation which should effectively protect the doctor against unfounded claims for damages when he is acting as a good Samaritan.

Alaska, California, Georgia, Maine, Massachusetts, Mississippi, Nebraska, North Dakota, Oklahoma, South Dakota, Texas, Utah, Virginia and Wyoming—14 states in all, have passed legislation to limit the liability, to some extent, of a doctor acting as a good Samaritan. The California statute is short but efficient in accomplishing its purpose of protecting the doctor. It states, "No person licensed under this chapter, who in good faith renders emergency care at the scene of the emergency, shall be liable for any civil damages as a result of acts or omissions by such person in rendering the emergency care."

House Bill No. 434 which was introduced in the last session of the General Assembly of Indiana failed to pass. It would have required any action against a doctor who acted as a good Samaritan to be brought within 30 days from the accrual of the action. It has been the experience of your speaker that quite often a proposed bill which is modeled after a bill already a law has a better chance of passage than one without an analogous precedent.†

Broad Coverage Sought

Whatever sort of a bill your association seeks to sponsor should be broad enough to cover any good Samaritan aid given by a doctor whether on the highways or anywhere else, and whether required by statute or given voluntarily by the doctor. The fact that 14 other states now have such legislation should be very persuasive in enacting a proper bill.

It would be safe to assume that the arguments presented by Professor Prosser for more humane duties toward persons who were injured and incapable of helping themselves, point the direction the law will

*"(b) The operator and owner, if present, of any vehicle involved in any accident, resulting in injury or death to any person or damage to property, . . . shall render to any person injured in such accident reasonable assistance, including the carrying of such person to a physician or surgeon for medical or surgical treatment, if it is apparent that such treatment is necessary, or is requested by the injured person.

"(c) Wherever the operator of a vehicle is physically unable to give the information or assistance required in this section, and there are other occupants of the vehicle at the time of the accident who are physically able to give the information or assistance required in this section, then each of such other occupants . . . shall render to any such person injured in such accident, reasonable assistance, including the carrying of such person to a physician or surgeon for medical or surgical treatment, if it is apparent that such treatment is necessary, or is requested by the injured person." —§ 75-1027 Purdon's Pennsylvania Statutes Annotated.

"§ 20003: Duty upon Death or Injury. The driver of any vehicle involved in an accident resulting in injury to or death of any person . . . shall render to any person injured in the accident reasonable assistance, including the carrying or the making arrangements for the carrying of such person to a physician, surgeon, or hospital for medical or surgical treatment if it is apparent that treatment is necessary or if such carrying is requested by the injured person."—West's Annotated California Codes, Vehicle Code §§ 20001 and 20003.

† The non-paying guests statute has had a successful experience in accomplishing its objects. It provides:

"The owner, operator, or person responsible for the operation of a motor vehicle shall not be liable for loss or damage arising from injuries to or death of a guest, while being transported without payment therefor, in or upon such motor vehicle, resulting from the operation thereof, unless such injuries or death are caused by the wanton or wilful misconduct of such operator, owner, or person responsible for the operation of such motor vehicle."—Burns 1952 Repl., § 47-1021.

Continued on page 74



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The first of three papers to be published on voluntary health insurance. They were presented at the Indiana Academy of General Practice "Insurance Day," Sept. 9, 1962.

The Future of Voluntary Health Insurance

*LOUIS S. DRAKE, Ph.D.**
Chicago

IT IS A PRIVILEGE to take part in this panel concerned with the future of voluntary health insurance, one of the critical topics in medicine, economics and public policy today. I am pleased that your committee has invited a student of economics to express his views along with those of physicians and the insurance industry.

To start, I should like to list the four main points of my talk. Then the next few minutes can be used to say a little more about some of the details.

First, there is a distinction to be made in two broad purposes which health insurance fulfills. One of these is simply to prepay medical expense. Much of this expense is budgetable and is expected in the same way that we expect to buy food, clothing and shelter. I can think of no better example than the young couple who get married with the intention of rearing a family, and either buy or expect their employer to provide insurance against maternity.

The other main function of health insurance is to protect families from unexpected and large medical expenses.[1] Treatment, hospitalization and care for infectious hepatitis or an embolism could be in this class. It is upon the latter function of health insurance, the protection against real risks, that I shall place most emphasis.

Secondly, despite early pessimistic predictions, voluntary health insurance has turned out to be a remarkably popular way of doing business. In less than two decades it has become a dominant American household institution. In spite of its growth, the figures which we have do not tell us enough about effectiveness in protection from serious financial setbacks. Thirdly, some of the data which we do have suggests that not over half, and probably less, of truly large medical expenses, ones which could be called "catastrophic," are actually covered by insurance. With the foregoing as background, my fourth point and conclusion is based on two "Ifs": IF voluntary health insurance coverage should increase, more adequately to protect consumer families from unexpected and large medical expenditures, and IF it should grow at a rate equal to the progress in medicine and rising demand for more and more medical service, THEN it should not be much of a surprise to see the amount of health insurance benefits increase from two and one-half to three times in the next ten years.

Growth of Health Insurance

The rise in numbers of people with health insurance protection has been remarkably fast. In 1940 there were 12.3 million people with hospital expense protection, or 9.3% of the population. By 1960 there were 132.0 million, or 73%. Recent increases have been especially great in persons covered for major medical expense, up from 21.9 million in 1959 to 27.4 million in 1960 or 25% in one year.[2] The present number under major medical is 15% of the population, and to some this might not look impressive. But major medical, like the younger broth-

* From the Department of Economic Research, American Medical Association.

er, is only ten years old and grows faster than his big brother, hospital insurance, did at the same age.

All health insurance benefit payments increased 12% last year, at which rate they would a little more than triple in ten years. Payments both by insurance companies and by Blue Cross-Blue Shield and other hospital-medical plans more than doubled since 1955.

It is hardly necessary to recite more statistics. More to the point is that ideas of what expenses should be insured have been greatly changed. Originally, and experimentally, policies offered were modest in comparison with what is now available. Benefit schedules were conservative in that they tended to set low maximum payments. No one was sure how big the flood of insured people into hospitals would be. No one knew how many prolonged, expensive cases would turn up.

More recently, there has been a trend toward great extension of maximums payable in benefits. This has been possible because there was not the overuse in cases of expensive and prolonged illnesses which actuaries first thought possible if not probable.

Secondly, the improvement in quality and effectiveness of medical care has greatly increased demand for benefits. At first underwriters experimented with hospitalization because it looked to be the most insurable part. No one, it was thought, would possibly go to a hospital unless forced into it by an emergency. But medicine progressed and hospital use grew more than anyone anticipated. The same principle applies to surgery and other medical care services. Mortality from surgery dropped, effectiveness increased, and more people now have more kinds of operations and get more good from them than ever before.[3]

The growth of the health insurance business, and the development of form and content of policies to serve consumers' needs, bring out one fact clearly. Least of all is there need for Congress to set up a parallel federal system.[4] It appears that those who would federalize financing of health care either are not acquainted with the progress of voluntary health insurance, or perhaps seek to use protection of the people's health as a political argument. The health insurance industry has shown abundant capacity to develop under its own power in a climate of free decisions of buyers and producers.

Measurement of Protection

How can we best measure achievement? If we take protection from risk to be the major premise of insurance, how can we tell how much is accomplished? The statistics often used do not show us what we need to know. For example, the percent of the population "covered" or with "some kind" of insurance tells little about effectiveness. Has a goal been reached, when everyone has a policy, no matter how limited or unrealistic?[5]

Another statistic is percentage of bills paid by benefits. Do these payments represent real side-stepping of risk, or do they mean prepayment of ordinary medical expense? How much of this is payment for ordinary maternity cases? Sometimes studies and articles suggest great reliance upon this percentage with little or no mention of families which may have large and critical outlays.[6]

Objections to foreign socialized systems are made on the ground that nothing is accomplished by the channeling of taxpayers' money to providers of health care, through agencies, with percentages siphoned off for administration along the way. How can government make better use of money than the people could directly, dealing with their own physicians?[7] Possibly this same question could apply partly, put not wholly, to voluntary plans if emphasis is on reimbursement for small expenses rather than on protection against risk.

Corporate and Institutional Buyers

Part of the reason for development of our forms of health insurance lies in how health insurance is most often sold. And most contracts are either sold directly, through labor-management, or are bought from employee trust funds. To quote one authority, "The American public wants more health insurance—the only question

is how much more . . . however, the decision will not be made by individual buyers, but rather by large purchasers representing large numbers. Labor likes health benefits because they are not taxed and are an invisible gain in an inflationary market."[8] Concern with coverage of the first dollar of expense suggests that what is negotiated is not altogether insurance in a true sense but is tax-free payment in kind, in goods and services instead of cash wages.

There is evidence that individual families are less inclined to buy coverage this way. It is said of the Health Insurance Plan of Greater New York: "When there are welfare funds, or employees and employers split the cost . . . coverage as extensive as HIP can be managed . . . when families must pay for the entire premium of HIP and Blue Cross . . . relatively few families will purchase. . . . When HIP offered coverage to persons and families not in groups and they had to pay the full cost (over $300 a year per family) fewer than 10,000 persons in New York City became insured."[9]

Function of Health Insurance

If it is not to pay small bills, what should be the function of health insurance? According to Webster in 1934 *insurance* was a contract wherein one party promised to indemnify another against loss by a specified contingency or peril. Applied to health, it was "insuring a person against loss due to personal illness resulting in disability."[10] By 1956 the definition had not changed. This is of passing interest in that it suggests that the compilers of the dictionary in 1956 did not review the meaning of health insurance. Few persons today would consider disability (presumably for work) to be a prerequisite of health insurance benefits. But perhaps the definition of basic insurance is still applicable.

Applying the idea of risk to health insurance, let us look at the facts. Only a small fraction of families, possibly less than two percent at the present time, do not have any medical care expense within a year.[11] It is almost certain that any one family will have some expense (Figure 1, Table 1).

That nearly every family has some expense needs to be considered in connection with another important fact, namely, that expenses of most families are not large. Nearly every one has some medical expense, but most of us don't have much of it. A fair rule is this, based on the most reliable information which we have: Over a half of the families at the low end of the expense scale have less than one-sixth of total medical expense. At the other end of the scale, the top one-sixth of families probably have over half of the total expense, and the top quarter of families have possibly three-quarters of the expense[12] (Figure 2).

The distribution of medical expense is

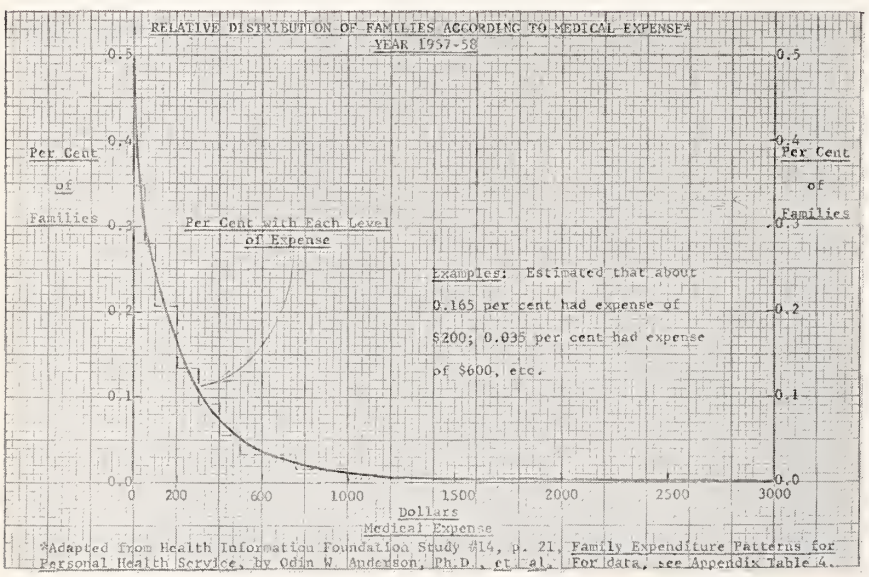


FIGURE 1

DISTRIBUTION OF FAMILIES AND MEDICAL EXPENDITURES*—1957-58

Class Interval	Average Family Expense**	Percent of Families	Percent of Total Expense	Cumulative Percentages Families	Cumulative Percentages Expenditures
None	$0	2.9%	0.0%	2.9%	0.0%
$ 0- 50	25	17.3	1.5	20.2	1.5
50- 99	75	14.0	3.5	34.2	5.0
100- 199	150	20.7	10.1	54.9	15.1
200- 299	250	13.5	11.3	68.4	26.4
300- 399	350	9.2	10.8	77.6	37.2
400- 499	450	5.7	8.6	83.3	45.8
500- 749	625	8.3	17.4	91.6	63.2
750- 999	875	3.8	11.2	95.4	74.4
1000- 1999	1500	3.9	19.7	99.3	94.1
2000+	2500***	0.7	5.9	100.0	100.0
Total	$297.60	100.0%	100.0%	100.0%	100.0%

* Adapted from Health Information Foundation Study #14, *Family Expenditure Patterns for Personal Health Services,* 1953 and 1958, by Odin W. Anderson, Ph. D., et al., p. 21, Calculations by the Department of Economic Research, American Medical Association.

** Assumed to be mid-point of class interval.

*** Open end class $2,000 and over, mean assumed to be $2,500.

TABLE I

extremely lopsided. A basic idea of insurance would be, ideally, to transfer some of the high outlays hitting at random among a few families at the top, to the majority of families who are fortunate enough to have only nominal expense.

Outlook for the Future

It is now time to piece together what the future could hold if health insurance programs are to serve best the public's need. To pin down terms, let us call above average expenditure the "risk element" in family health outlays. The average is obtained simply by dividing all of the expense by all of the families. Analysis of data by the Health Information Foundation suggests that 40% of all expenditures may be in the "above average" class. Average expendi-

Continued on page 82

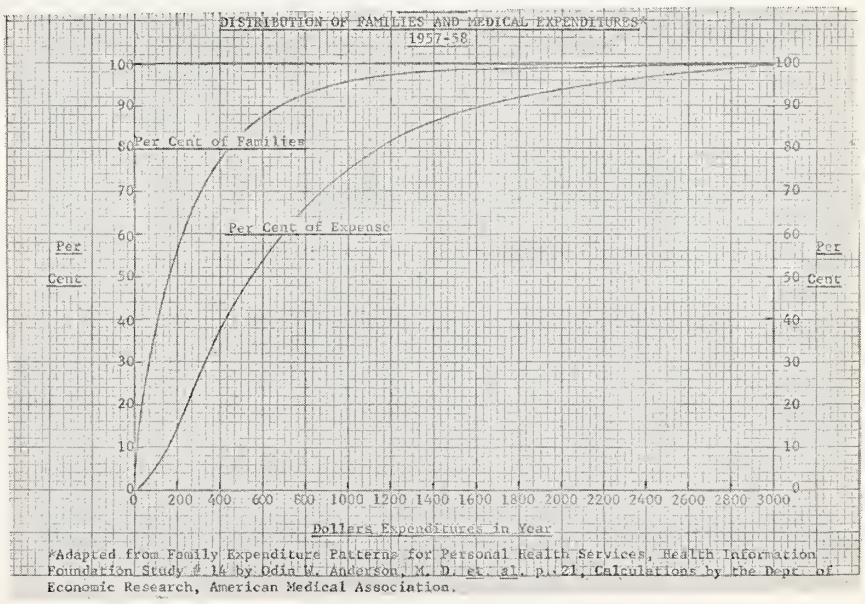
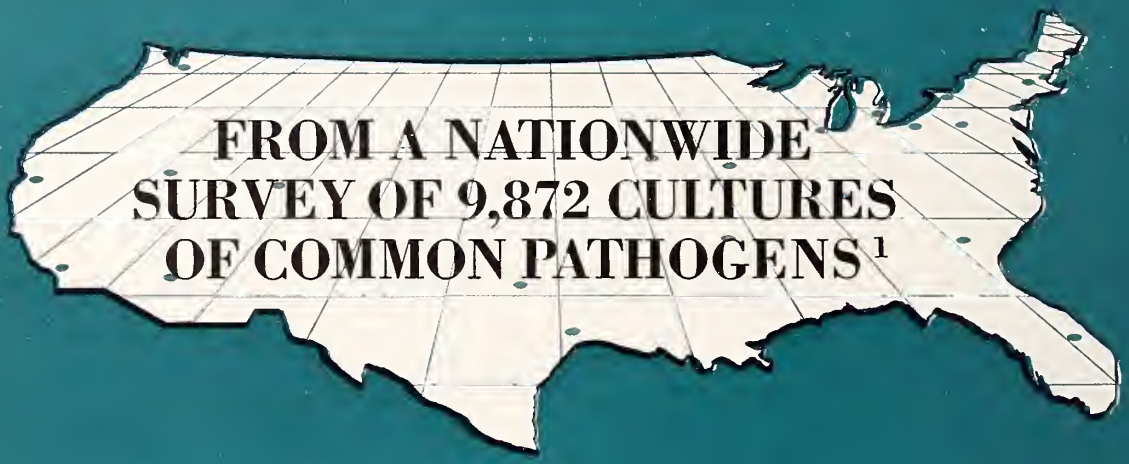


FIGURE 2

*Adapted from Family Expenditure Patterns for Personal Health Services, Health Information Foundation Study # 14 by Odin W. Anderson, M. D. et al. p. 21, Calculations by the Dept. of Economic Research, American Medical Association.



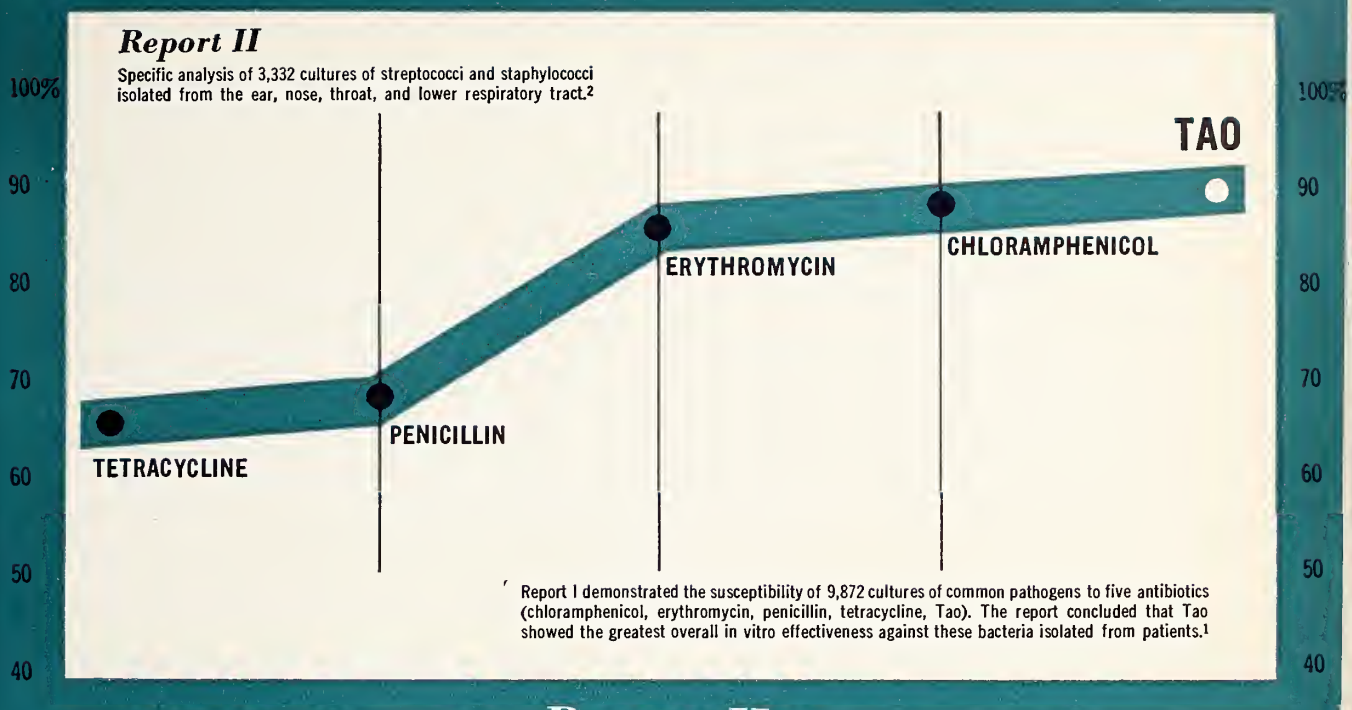
FROM A NATIONWIDE SURVEY OF 9,872 CULTURES OF COMMON PATHOGENS[1]

Conclusions of Nationwide Survey: *Report I*

1. Even after five years of general use, Tao, of the antibiotics tested, demonstrated greatest activity against respiratory streptococci and staphylococci (3,332 cultures).

2. Overall results showed a higher percentage of susceptibility among these common pathogens to Tao than to the other antibiotics. Susceptibility to Tao was greatest, not only in respiratory streptococci and staphylococci, but also in these organisms isolated from skin and soft tissue (3,423 cultures), genitourinary and gastrointestinal tracts and other sources (2,458 cultures). Susceptibility was equal to all antibiotics tested in pneumococci from unspecified sources (463 cultures), and less to Tao in H. influenzae from unspecified sources (196 cultures).

3. Tao has been used for five years without development of predictable cross resistance. In 1958 and 1961, approximately 73% and 70%, respectively, of erythromycin-resistant problem staphylococci showed susceptibility to Tao.[3,4] The present study confirms the continuing high degree of Tao activity even against these pathogens. Of 1,592 cultures of erythromycin-resistant staphylococci, 68% were susceptible to Tao, while in the reverse situation, only 33% of 768 Tao-resistant staphylococci were susceptible to erythromycin.



Report II
Results of Bacterial Susceptibility in 3,332 Respiratory Pathogens

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ture in the year of the HIF Survey was $298 per family. The reason why the figure is as low as 40% is, of course, that the average amount is deducted from expenditures of *all* families. In this way we can arrive at what we have here called the "risk element," expense in the range above average expense, $384 (Table II).

Now, the average medical expense per family is considerably higher than what most families spend. This may sound like a contradiction but is caused by the tendency of a few families with non-typical, high expense to pull up the average—the lopsided distribution again.

One measure of *typical* expense is the median, the figure around which there are as many families who spent more as there are who spent less. Thus, if you're at the median, half of the families had less expense than you did, and half more. In the 1958 survey by the HIF the median was $174 or only 0.59% as much as the average, $298 (Table III).

But, even the expense in between the median and the average is avoided by most families, so we could conceivably think of this as being a risk element also. About 20% of family expenditures fall in this range. Thus, a total of 40% plus 20%, or 60% of family medical expenditures are higher than the dividing line between those who spent more and those who spent less, the median (Table IV).

This, of course, leaves the remaining 40% of all medical expense in the range from nothing to the median. This includes, as said earlier, 50% of all the families who spent less than the average amount for medical attention. It also includes median expense for all families who spent more than the median itself. Payment of insurance benefits in this range can hardly be called reimbursement for calamitous events, crippling losses or catastrophe (Table V).

With this kind of a picture of distribution of family medical expenditure and knowing what we do about how much money is spent in total for medical care, what conclusions can we draw concerning the risk-carrying function of health insurance? In 1958, 42% of medical expense, or $6.5 billion would have been "insurable" in the sense used here. Another 18% or

DISTRIBUTION OF FAMILIES AND MEDICAL EXPENDITURES ILLUSTRATIVE EXTENSION TO 1961, FROM 1957-58 SURVEY*

Percent of Families	Average Family Expense**	Amount Contributed to Average	Percent of Total Expense	Cumulative Percentages Families	Cumulative Percentages Expenditures
1.0%	$ 0	$ 0.00	0.00%	1.0%	0.0%
13.0	25	3.25	0.85	14.0	.85
12.0	75	9.00	2.34	26.0	3.19
17.0	150	25.50	6.63	43.0	9.82
15.0	250	37.50	9.75	58.0	19.57
12.0	350	42.00	10.92	70.0	30.49
8.0	450	36.00	9.36	78.0	39.85
10.0	625	62.50	16.25	88.0	56.10
5.0	875	43.75	11.37	93.0	67.47
5.0	1500	75.00	19.50	98.0	86.87
2.0	2500***	50.00	13.00	100.0%	99.97%
100.0%	$384.50	$384.50	100.00%	100.0%	100.00%

* Adapted from Health Information Foundation Study #14, *Family Expenditure Patterns for Personal Health Services*, 1953 and 1958, by Odin W. Anderson, Ph. D., et al., p. 21, Calculations by the Department of Economic Research, American Medical Association.

** Assumed at mid-point of class interval.

*** Open end class.

TABLE II

$2.8 billion could have been in the "twilight zone" above median family expense but below average, making a total of $9.3 billion.[13]

How much of this was reimbursed by benefits? This figure cannot be told with certainty, but $5.7 billion in total benefits were paid in the year 1958.[14] However, substantial amounts of benefits were probably applied against family expenditures which were small. A conservative guess is that at least a billion dollars of benefits were paid to families whose medical expenditures didn't really amount to much.

On this basis, the remaining $4.7 billion could be applied, as a maximum, to the $9.3 billion of family expense which was higher than typical (higher than the median). In other words, benefits paid to families whose expenses were large did not cover more than 50% of such expenses and could have taken care of less.

But, before going too far with this line

ESTIMATES OF FAMILY MEDICAL EXPENDITURES ABOVE MEDIAN, YEAR 1957-58*

Ronge of Expenditures	Percent af Total Fomilies	Expenditures in Excess of $175	Cantribution to Averoge Expense over $175
$ 0- 99	34.2%	$ 0	$ 0.00
100- 174	15.8	0	0.00
176- 199	4.9	12	0.60
200- 299	13.5	75	10.10
300- 399	9.2	175	16.10
400- 499	5.9	275	15.65
500- 749	8.3	450	37.40
750- 999	3.8	700	26.60
1000-1999	3.9	1325	51.70
2000 and over	0.7	2325	16.25
Percent of Families Spending Over $175	50.0		
Average Expense in Excess of $175			$174.40

It is coincidental that the average expense above the median ($174.40) is almost identical with the median itself ($175).

* Derived from Health Information Foundation Study #14, *Family Expenditure Patterns for Personal Health Services*, by Odin W. Anderson, Ph.D., et al., p. 21, Calculations by the Dept. of Economic Research, American Medical Association.

TABLE III

ESTIMATES OF FAMILY MEDICAL EXPENDITURES ABOVE MEAN OR AVERAGE YEAR 1957-58[1]

Closs Interval	Amount Abave Arithmetic Meon[2] Abave $300	Percent of Families	Cantribution To Average
$ 0- 0	0	2.9%	$0.00
0- 50	0	17.3	0.00
50- 99	0	14.0	0.00
100- 199	0	20.7	0.00
200- 299	0	13.5	0.00
300- 399	50	9.2	4.60
400- 499	150	5.7	8.50
500- 749	325	8.3	27.00
750- 999	575	3.8	21.80
1000-1999	1200	3.9	46.80
2000+	2200	0.7	15.40
Totals		31.6	$124.10

1. Derived from Health Information Foundation Study #14, *Family Expenditure Patterns for Personal Health Services*, by Odin W. Anderson, Ph.D., et al., p. 21.
2. Arithmetic mean is total expense divided by number of families. It is usually thought of as the "average."

TABLE IV

RELATIVE DISTRIBUTION OF FAMILIES ACCORDING TO MEDICAL EXPENSE* YEAR 1957-58

Closs Interval	Average Expense Per Fomily	Percent of Fomilies in Eoch Closs Intervol of $1.00
None	0	2.900%
$ 0- 49	25	0.346
50- 99	75	0.280
100- 199	150	0.207
200- 299	250	0.135
300- 399	350	0.092
400- 499	450	0.057
500- 749	625	0.033
750- 999	875	0.015
1000-1999	1500	0.004
2000+	2500**	0.001
Total	$297.60	***

* Source, See Table 1.

** Open end class $2,000 and over, mean assumed to be $2,500.

*** Adds to 100 when allowance made for variation in size of expenditure class intervals (Column 1).

TABLE V

of thinking, *should* all expenditures above the average, above the median, or above any other figure, be compensated by insurance benefits? For many reasons we would not expect to come anywhere near matching all expenditures above any set limit, by benefit payments. Reasons include expectation of some co-insurance, that some rich families may prefer to "carry their own" insurance to a higher limit than most people, provision for health care through other arrangements, and that some expense, such as payments to quacks, is not insurable.

But, can we say that 80% of expenses above median could be compensated by benefits? Eighty percent of the $9.3 billion of expenditures above-median expense would be $7.4 billion. This can be compared with the $4.7 billion mentioned earlier, the estimate of benefits for above-median expense in 1958. The additional amount needed to get benefits for above-median expenditures up to an 80% level would be $2.7 billion. This is just a little short of 50% of the total benefits paid, in 1958 ($5.7 billion). In other words, by this reckoning, voluntary health insurance could expand another 50% above over most recent data to fulfill its risk-bearing function alone, regardless of other purposes.

Summary

So, volume of health insurance benefits could well be increased another 50% above 1958 to do a reasonable job of protecting against risk, even if medical science should stand still for the next few years. The latter, of course, is an unrealistic assumption. Judging by indications of rising demand and progress in sciences, consumer buying of medical care will probably increase by another 75% in the next decade.

Combining both factors, the increase in the volume of health insurance benefits to fulfill the risk-bearing function, and increase in consumption of medical care services, the level of health insurance benefits could increase from two and one-half to three times during the 1960's. If there is continued inflation of the level of consumer prices, the rise would be greater.

There may be some tendencies of the consuming public to think of health insurance as they would think of "insurance" for items which are hardly insurable, such as food and the telephone bill, because the risk element is lacking. I cannot think of any other kind of insurance under which the idea that one ought to "get money back" is so widespread. Possibly there is sound practical reason for the public attitude toward some kinds of health insurance in the tax structure and way of selling health benefits. Education of the public to prefer freedom from risk rather than collecting something on small bills could be beneficial.

Less than half of the families actually incur average medical expense. It is, therefore, questionable that an appeal to sense of financial housekeeping can be made, that families "ought to" budget average expense. They may be more apt to think in terms of an expense considerably less than the true average. Therefore, there is, in addition to providing for catastrophic expense, a place for voluntary insurance or prepayment plans, to cover expenses which are larger than typical, but less than the real average—a certain amount above what would usually be expected.

In protection against risk of large loss, and to help families to stay within their incomes, there is overwhelming reason to look for another ten years of growth of voluntary health insurance. Ideas of needed kinds of coverage may change to place greater emphasis on protection from risk.

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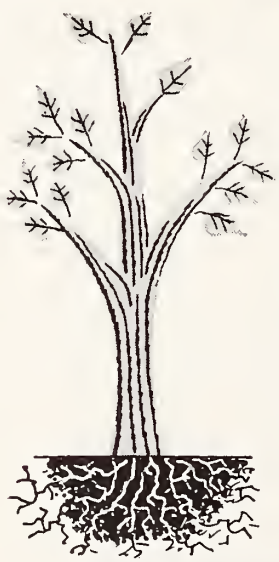
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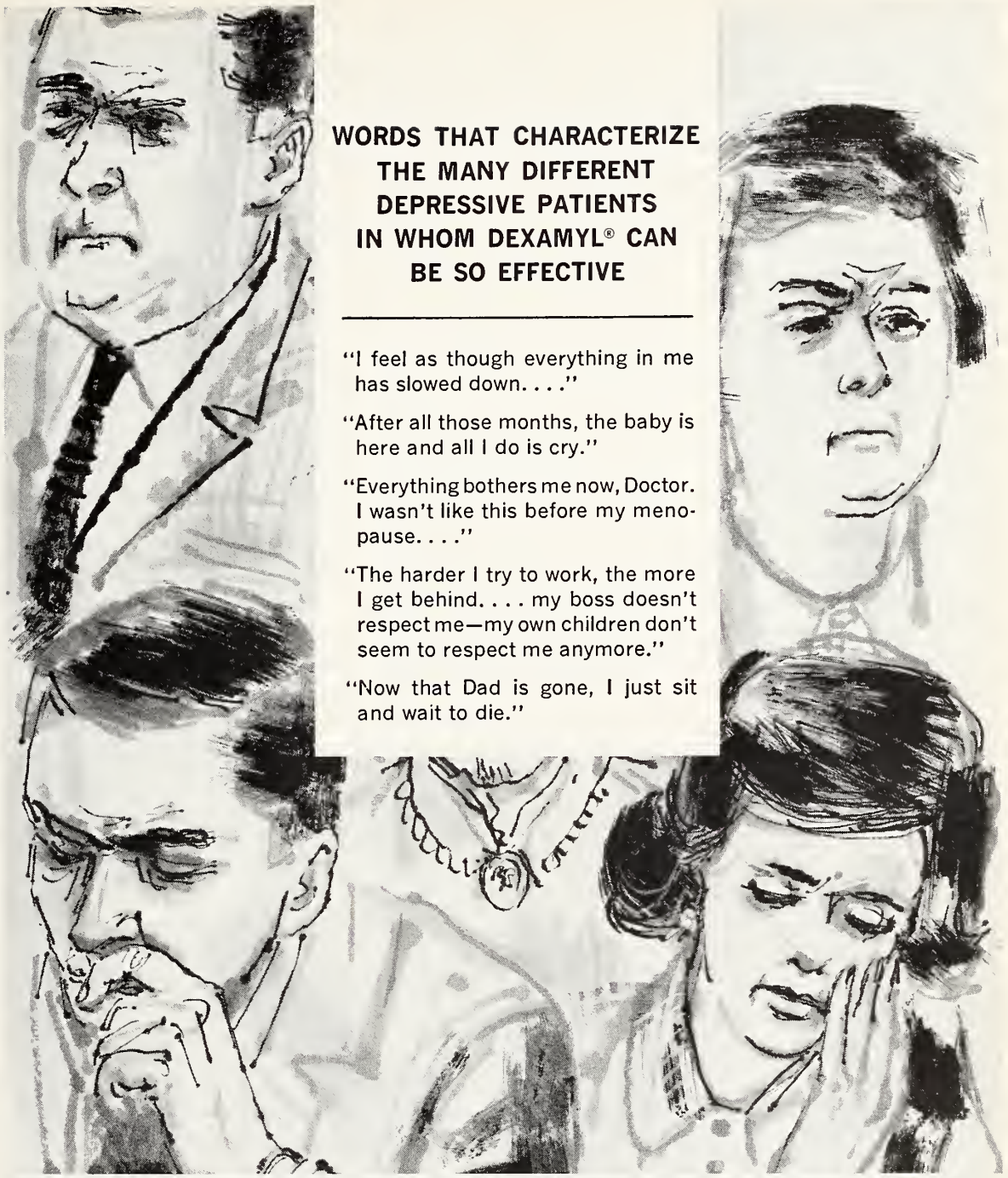
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Gleaned from the British Medical Journal

JACK W. HICKMAN, M.D.
Indianapolis

Since proctalgia fugax occurs so frequently in physicians, it seems worthwhile to mention an article by Douthwaite[1] on this aggravating condition. He reviews the literature on this condition over the past 85 years, and gives the valuable definition of "proctalgia fugax may be defined as pain seemingly arising in the rectum, recurring at irregular intervals and being unrelated to organic disease." Another unique feature of the condition was that many of the patients had self-performed rectal examinations done before presenting themselves to the author. He concludes that the pain does not actually arise in the rectum, but that it is caused by spasm of the pubococcygeus muscle, and that the condition is "harmless, unpleasant, and incurable."

* * *

Two articles[2, 3] dealing with needle biopsy of the pleura are noted, and they both reaffirm the value of this diagnostic procedure. Sison and Weiss used the Vim-Silverman needle, and Hanson and Phillips used a Harefield needle but both had similar results and the incidence of complications was quite low. Positive tissue diagnoses of tuberculosis were established in 28-61% of the patients and of malignancy in 59-69%. The procedure is not advised when there is no pleural effusion or the pleura is non-adherent. This procedure can frequently be helpful in establishing a diagnosis in patients with pleural effusion.

* * *

Stoll[4] presents a study on the effectiveness of various drugs in the treatment of radiation sickness in 1,042 randomized drug trials. The drugs were assessed for their value in suppressing anorexia, nausea, vomiting, and listlessness. The drugs found to be of most value in alleviating these troublesome symptoms were pyridoxine and the older phenothiazines (chlorpromazine, prochlorperazine, etc.). The "relatively inert" drugs (amphetamine, Benadryl, cyclizine) and the newer phenothiazines such as Stelazine were less effective.

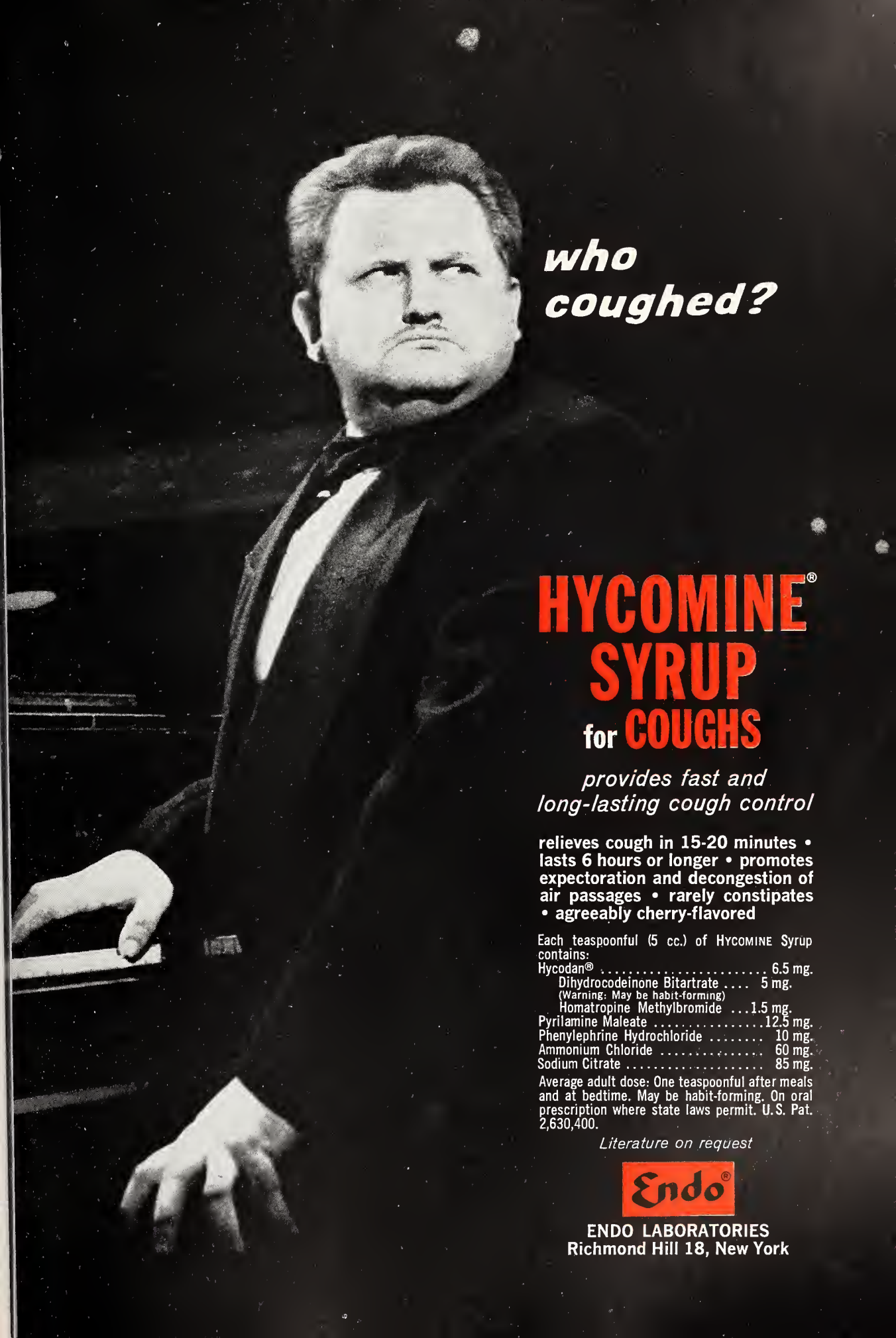
* * *

The first sentence of an article by Redwood[5] casts doubt upon the value of the entire article: "Little has been written on the value of good diabetic control in the treatment of the complications of diabetes mellitus, although it is generally assumed that such control is necessary." This by itself should cause Dr. Elliott P. Joslin to turn over in his grave. Redwood presents three cases who had improvement of leg pains and wasting after what he considers "good control." Under control, these patients had morning blood sugars of 160 mg.%, 190 mg.%, and 180 mg.% with one patient showing afternoon sugars of 230 mg.%. It is true that the definition of "good control" varies, but surely most would class these patients as "fair." The author has references to the works of three men at the end of his article, and one of these was published in 1890. Articles such as this are surprising in this usually excellent journal.

* * *

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Some Reflections Upon Organized Medicine

LLOYD HILL, M.D.
Peru, Indiana

MIAMI COUNTY has been waging what might have appeared to be a "One Man Crusade" for a change in voting procedures of the ISMA House of Delegates. As important as we in Miami County feel our resolution was per se, it carried with it many hidden implications. The purpose of this article is to bring these implications out of hiding.

I attended my first full meeting of the ISMA in 1959. No one had explained to me just what transpired at the House of Delegates and I had never taken the trouble to find out until then. We have a system set up in our local society whereby the immediate past-president becomes delegate to the ISMA. I can see now where this is not too wise a procedure to follow; but tradition has dictated many rather ridiculous policies. Nevertheless, since I was president of the Miami County Medical Society in 1959, I realized I was soon to be our delegate. Not having the slightest idea of how to conduct myself as a delegate, I felt it appropriate that I attend as an observer that year.

This turned out to be rather a joke, if I expected this to make me a well informed delegate; for since this time I have attended every session and I find myself still rather damp behind the ears as a delegate even though I learn more during every session. (I attended as alternate delegate in 1960 and 1961 inasmuch as our delegate could not attend due to illness. I could not extricate myself as president of our society which has the dual office of alternate delegate.) Participating in the proceedings of the ISMA House of Delegates has been a most enjoyable experience offering a wealth of challenges along with wonderful fellowship and a vast knowledge—both medical and political.

When I leave these meetings to return to my local community and talk with physicians there, and in other areas as well, I am amazed at the bitterness and resentment of far too many of our colleagues toward organized medicine. This, indeed, is a tragedy almost, if not as great, as the ever increasing threat of socialism. Unrest and resentment among the grassroots physician was quite apparent to me long before I became active in organized medicine. However, I did attempt to keep an open mind concerning this feeling until I could discover for myself if it was justified. Fortunately, I can now say with conviction that this feeling is only slightly warranted.

It is a strong feeling of mine that those of us striving for a stronger and more functional organization have overlooked a most vital responsibility. With but few exceptions, each physician independently wants his professional freedom and abhors the thought of government medicine under *any* guise. We all differ, however, as to how we should combat this threat. These differences combined with individual apathy and lack of diplomacy on the part of too many of those actively participating in organized medicine have brought about the widening breech between organized medicine and grassroots support.

Organized Medicine Must Close Ranks

Organized medicine has been too preoccupied on too many other fronts to recognize the deterioration in its own ranks. Public relations is as vital to our own members as it is to those outside our ranks.

Unless these "loose ends" are picked up and convinced that organized medicine will represent them faithfully if only given the opportunity to hear their views, they will continue to be a menance to the cause of freedom—ours as well as their own—by making derogatory remarks to their patients concerning their own organization.

I do feel that what we in Miami County have accomplished certainly invalidates the false accusations that policies of organized medicine are determined by a small clique of physician-politicians who pompously determine policies arbitrarily according to their own scheming ideas. We who attend these meetings know that this certainly is opposite the truth. However, we must convince the physicians back home of this. The Miami County resolution originated from the obstinate mind of only *one* member of the Indiana State Medical Association—mine. I did not approve of the voting procedures of the House of Delegates, especially on important issues.

I could see where some very undesirable decisions could be "ramrodded" through the House by the use of mere mob psychology or "loud voice" tactics drowning out and creating a false sense of futility of a majority of members who individually oppose such decisions. This should never be tolerated on issues of importance and I believe Miami County's resolution will help prevent such a situation. I carried my initial observations back to those whom I represent and they agreed wholeheartedly with me. We therefore composed a resolution calling for the change.

Though it required two years to obtain its passage, I feel that it was still the individual apathy and lack of grassroots support at the meeting in Indianapolis in 1961 that caused its tabling action then. Even in 1962 at French Lick it did come out of reference committee somewhat modified and passed on the floor of the House in spite of the lack of grassroots support.

At the risk of sounding egotistical, I am convinced that sheer persuasion convinced the members of the reference committee that the majority of the overall membership favored our resolution and their absence from the meeting was even more evidence that this same majority was displeased with organized medicine—in fact, so displeased that they felt it useless to come down and waste their valuable time talking to the arrogant "big-wigs" who will "run the organization the way they damn well please anyway!" At least, we now have tangible evidence that *anyone* in organized medicine can definitely help determine policies if he would go about it in the only effective and practical way possible.

It has been suggested by many of the cynical critics in our organization that the AMA and the ISMA should be junked and a new organization be formed. They are overlooking the primary factor responsible for dissention within any organization—the vast heterogeneity in organizations of any size at all. Although these critics seem to be united and prolific in their opposition to the policies of organized medicine, they certainly are not united amongst themselves as to what should be done. Their new splinter group would soon splinter into smaller and smaller splinters all fighting one another while we are all defenseless against the well organized socialists.

What about the new organizations already formed, such as I-HOPE, AMPAC and AAPS? These are not splinter groups, but subsidiary organizations set up to perform a job which the traditional organization is prohibited from doing. Furthermore, these new organizations work in close proximity to and in cooperation with the ISMA and AMA. In fact, their accomplishments are contingent upon the good name and reputation of the parent organizations.

When our patients return from their union meetings and consume the liberal garbage of our liberal mass news media, they are misled to believe that the AMA and its subsidiary organizations are evil-doing, selfishly motivated, conniving groups preying upon their hard earned wages. Then when they hear their own physicians or overhear a group of physicians talking in hospital corridors condemning these same medical organizations, what is the only conclusion the patient can come to? This is the crux of our most pressing

problem—every bit as important as, and prerequisite to, defeating the socialists.

Unity is our Strength

We must sell organized medicine to every possible physician as well as sell the objectives of organized medicine to our patients. This is where those of us dedicated to organized medicine have failed miserably—we have been darn poor salesmen. This we cannot delegate to our lay assistants. We physicians must do it ourselves. We cannot do this by trying to cram distasteful policies down the memberships' throats. They must develop a taste for them and realize that this battle was forced upon us and it costs to fight a war in order to protect our freedom. Without a fight, we are certain to lose and no one is strong enough to stand alone. United, we at least have a chance to stand. We must *sell* organized medicine to our own members by convincing them they need the organization as much as it needs them and give a more sympathetic ear to any constructive criticism they may have to offer.

Any organization as large as ours conducts its business *fairly* and effectively only through a representative form of government. In a delegated type of government, the delegate supposedly votes in the best interests of those whom he represents and must be held accountable for his actions. It is very essential that each member attend, participate in and advise his delegate well during the local society meetings. Furthermore, the member should, if at all possible, attend and participate in the all important reference committee hearings of the ISMA where the ultimate policies are finally molded. Their voices will be heard and fairly considered at these hearings. The member should then once again advise his delegate as to his wishes about the ultimate policies to be voted upon (which may be entirely different from the original forms). It is my surmise that most of our dissenting members haven't the slightest idea of the necessarily complex but vitally important mechanism of organized medicine.

The membership must be convinced that they *can* change the policies of organized medicine if they have sufficient support. But if they are not present at these important meetings, they cannot hope to make their views known where they really count, let alone bring about any desired change. If the membership is not satisfied with the actions of their delegate or councilor (they must have a means by which to know this —i.e., Miami County's resolution)—they should remove him from office and elect someone who will do a better job.

Summary

Every physician interested in his own professional freedom must take a more active interest in organized medicine and more actively participate in and support it. He must take a closer look at the "Table of Organization" of organized medicine from the grassroots physician on up to the AMA and see where he fits into this plan. He must be shown that he is the very foundation of the organization. A house is not made stronger by putting more weight on its roof, and without a strong foundation a house will soon crumble.

Organized medicine needs the moral as well as the financial support of every available physician. In fact, if more moral support were given organized medicine, the financial support would naturally follow. Let's all be better salesmen of freedom NOW before we have no freedom to sell. ◄



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Report on Actions of the House of Delegates American Medical Association

16th Clinical Meeting
November 25-28, 1962
Los Angeles, Calif.

LOS ANGELES, Nov. 28—Arguments for a Jay County resolution by Dr. E. S. Jones before the AMA House of Delegates meeting in Los Angeles resulted in the House over-riding a reference committee's disapproval.

The resolution, presented first to the ISMA House of Delegates at its October, 1962, meeting suggested that one or two years of practice in small communities be incorporated into intern and residency programs as a possible method of attracting more physicians to rural areas.

The AMA reference committee said that the resolution was not necessary and that it disapproved of the resolution.

Following Dr. Jones' remarks, however, the House deferred the reference committee's report and referred the resolution to the AMA Council on Medical Education and Hospitals for study and report.

The second resolution presented by the Indiana delegation called for an investigation of the expanding list of activities of the National Foundation. This resolution was submitted by Indiana's Commission on Voluntary Health Agencies.

This resolution was referred to the AMA Board of Trustees with the request that careful study be made of the resolution and a report with the board's recommendations be presented to the next AMA House of Delegates meeting.

Indiana's delegation to the meeting was composed of Drs. Harold C. Ochsner, Indianapolis; E. S. Jones, Hammond; Francis L. Land, Fort Wayne; Jack E. Shields, Brownstown, delegates; Lester D. Bibler, delegate from the section on General Practice; and Drs. Robert M. Brown, Marion; George W. Willison, Evansville; William B. Challman, Mt. Vernon, and John M. Paris, New Albany, alternates.

Also attending from Indiana were Drs. Maurice E. Glock, president; Donald E. Wood, president-elect; K. O. Neumann, chairman of the Council; Wendell E. Covalt, chairman of the Executive Committee; and Lall G. Montgomery, member of the AMA Reference Committee on Legislation and Public Relations; James A. Waggener, Executive Secretary, and Joseph E. Palmer, Administrative Assistant.

Members of the association met daily at breakfast with the delegates and alternates to discuss resolutions and other matters coming before the House. Decisions were then made as to the position Indiana delegates would take on various proposals.

The delegates and alternates were split up so that all reference committees were covered by a representative of the association. This way the delegation had first hand knowledge of the discussions which came before the reference committees.

A reception was held Monday night, Nov. 26, for the Indiana University alumni residing in California in the Indiana Hospitality Suite.

House Actions

Health care for the aged, medical ethics, graduate medical education, expansion of the AMA Board of Trustees and a study of the sections and scientific program of the AMA were among the major subjects acted upon by the House.

In keynoting the Association's attitude toward Social Security health care for the aged, Dr. George M. Fister of Ogden, Utah,

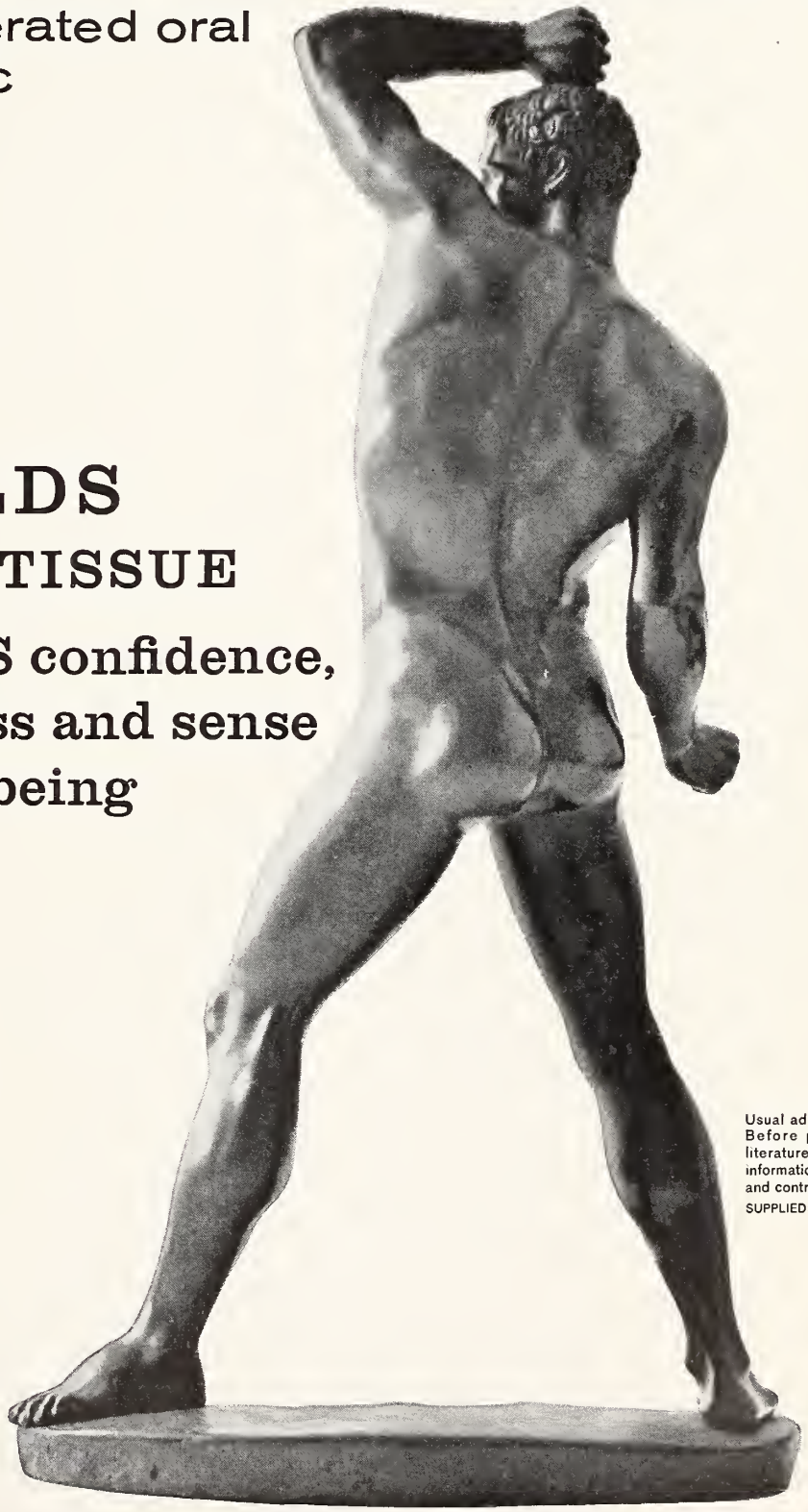
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AMA president, told the opening session of the House:

"We will not compromise on the fundamental principles in which we believe and for which we have fought in the past with courage and good judgment. We will not jeopardize our position either by indicating a willingness to consider a compromise which would damage our basic principles, or by hasty action which might be misinterpreted."

Dr. Fister urged the entire medical profession to understand the basic issues in this struggle so that they can recognize the difference between compromise and surrender.

"The people will respond to the truth," he said, "and it is imperative that we as individuals and as an organization see that they get the truth."

Reaffirms Stand on Kerr-Mills

The House reaffirmed, without compromise or change, the Association's present policy of opposition to the King-Anderson type of legislation and support for the Kerr-Mills program. In so doing, it also approved in principle the following suggested amendments to the Kerr-Mills Law:

1. Remove the requirement that both Old Age Assistance (OAA) and Medical Assistance for the Aged (MAA) programs be administered by the same agency;

2. Provide flexibility in the administration of the income limitations proposed under state law so that a person who experiences a major illness may qualify for benefits if the expense of that illness, in effect, reduces his money income below the maximum provided;

3. Include a provision in the law requiring state administering agencies to seek expert advice from physicians or medical societies through medical advisory committees; and

4. Provide for "free choice" of hospital and doctor under state programs.

At the same time, the House also endorsed in principle four proposed amendments to the Internal Revenue Code, designed to assist in financing the medical and hospital expenses of the aged. These amendments would: liberalize tax deductions for medical expenses of dependents over age 65; remove the 1% drug limitation and include drugs as medical expenses; permit taxpayers over age 65 to receive full tax benefit for medical expenses by use of the carry-forward and carry-back principle, and provide a tax credit for medical expenses paid by the over age 65 taxpayer, proportionate to the relation between his medical expense and taxable income.

The House also approved a status report which concluded with this statement:

"It is our strong conviction that the legislative situation, the expanding health insurance and prepayment coverage, the improving economic status of the aged, and the many other factors cited in this report require that we face the 1963-1964 Congressional campaign without defeatism or complacency and with pride in the progress that has occurred. Finally, it is, above all, essential that our position not be undermined by the adoption of any policies that compromise our basic principles."

In considering seven so-called "pledge" resolutions, involving professional freedom, the House adopted a substitute resolution urging that all physicians be encouraged to support the position taken by the House of Delegates in June, 1961. That policy statement said:

"The House of Delegates invites attention to the fact that the medical profession is the only group which can render medical care under any system and that the medical profession is best qualified to determine how the best medical care can be delivered.

"The House of Delegates believes that the medical profession will see to it that every person receives the best available medical care regardless of his ability to pay, and it further believes that the profession will render that care according to the system it believes is in the public interest and that it will not be a willing party to implementing any system which is detrimental to the public welfare."

Medical Ethics

The Judicial Council submitted a report containing new opinions on the medical

ethics involved in physician ownership of drug stores, drug repackaging houses and drug companies, dispensing of glasses by ophthalmologists, and advertising practices of medical laboratories. The House decided that the questions of physician ownership of drug stores, drug repackaging houses and drug companies, and the dispensing of glasses by ophthalmologists, should not be acted upon at this time. Those opinions were returned to the Judicial Council for further study and report.

The House approved the portion of the report relating to advertising practices of medical laboratories and agreed that the propriety of such practices should be determined at the local level in compliance with the new opinion. The House also approved the rules of procedure adopted by the Judicial Council for disciplinary action in cases where the Association now has original jurisdiction as conferred by the June, 1962, change in the Bylaws.

Interns and Residents

A special report on the compensation of interns and residents, which was published in the October 27 issue of *JAMA*, was presented to the House by the Council on Medical Education and Hospitals and the Council on Medical Service. The report was submitted as information only, with a request for further study, comments and suggestions. The House urged that all delegates, hospital staffs and medical societies discuss the report and forward all suggestions to the two Councils in time to influence the form of the report to be presented for action at the June, 1963, meeting.

In another action on graduate medical education, the House approved a report on internships and hospital services in which the Council on Medical Education and Hospitals recommended numerous changes in the Essentials of an Approved Internship. The House declared that "their acceptance will further strengthen the educational values of the internship and advance American medicine's contribution to worthy goals of international educational exchange."

The House modified one Council recommendation to read as follows:

"In order to maintain high standards of education and better assure the patient's welfare, at least 25% of the total house staff (interns and residents) of a hospital should be graduates of accredited United States or Canadian medical schools. When United States and Canadian graduates represent a lesser portion of the house staff for two successive years, this will warrant that serious consideration be given to disapproving the internship."

The House instructed the Council on Medical Education and Hospitals to exert every possible effort and influence so that all hospitals with approved house officer training programs accept a reasonable number of foreign medical school graduates.

Board of Trustees

The House, by a vote of 130 to 48, adopted changes in the Constitution and Bylaws which would have implemented the June, 1962, recommendations of the Ad Hoc Committee on the Board of Trustees, including expansion of the Board from 11 to 15 members. However, the Judicial Council later informed the House that the affirmative votes necessary to amend the Constitution should have totaled at least 144, or two-thirds of the 216 voting delegates registered at the Wednesday session. The House then adopted a motion to vote on the proposed Constitutional amendments, in accord with the changes made in the Bylaws, at the opening session of the June, 1963, meeting.

Sections and Scientific Program

A report by the Committee to Study the Scientific Sections, recommending major changes in the organizational structure and scientific program of the Association, was presented to the House by the Board of Trustees. However, because of many requests for delay in approval, the House instructed the Speaker to appoint an Ad Hoc Committee composed of members of the House, and including representatives of the sections, to study the subject and report next June.

Miscellaneous Actions

In considering a wide variety of resolu-

tions and annual and supplementary reports, the House also:

Instructed the Board of Trustees to use every influence in their command to have the *Hill-Burton Law* amended in such a manner as to eliminate all categorical grants, eliminate the term "diagnostic and treatment centers" from any listings in the act and prevent federal funds being awarded under existing law as a grant to closed panel medical corporations to build diagnostic and treatment centers.

Declared that it is both the responsibility and duty of the AMA to submit testimony before Congress on the subject of *research appropriations* in the health field.

Urged state and county medical societies to continue promoting the aggressive, consistent development of *Blue Shield* senior citizen programs.

Encouraged medical societies and physicians to provide cooperation and leadership in the formulation and operation of regional *hospital planning* bodies.

Approved *Essentials* of Acceptable Schools for Inhalation Therapy Technicians, Cytotechnology and Medical Technology and of Approved Residencies in Pediatric Cardiology.

Recommended that a Board report and two resolutions dealing with the *"Liberty Amendment"* be re-referred to the Council on Legislative Activities for further study.

Warned against the dangerously low level of immunization for *smallpox* and urged physicians and their patients to maintain the needed protection.

Pointed out that state and county medical societies should collaborate with departments of *public health* in the interest of community health, always keeping in mind the need for a proper balance between local public health programs and the private practice of medicine.

Authorized the Board of Trustees to investigate the feasibility of establishing a *physicians' pension plan* and to present a plan for the implementation of such a program to the House in June.

Instructed the Board of Trustees to study the feasibility of *regional clinical sessions,* taking into consideration the already established regional meetings of medical specialty groups and the Academy of General Practice.

Commended the Council on National Security and its Committee on *Disaster Medical Care* for initiating a visitation program with committees on emergency medical service of state medical societies.

Expressed appreciation and thanks to the *Woman's Auxiliary* for their impressive accomplishments in behalf of our free society.

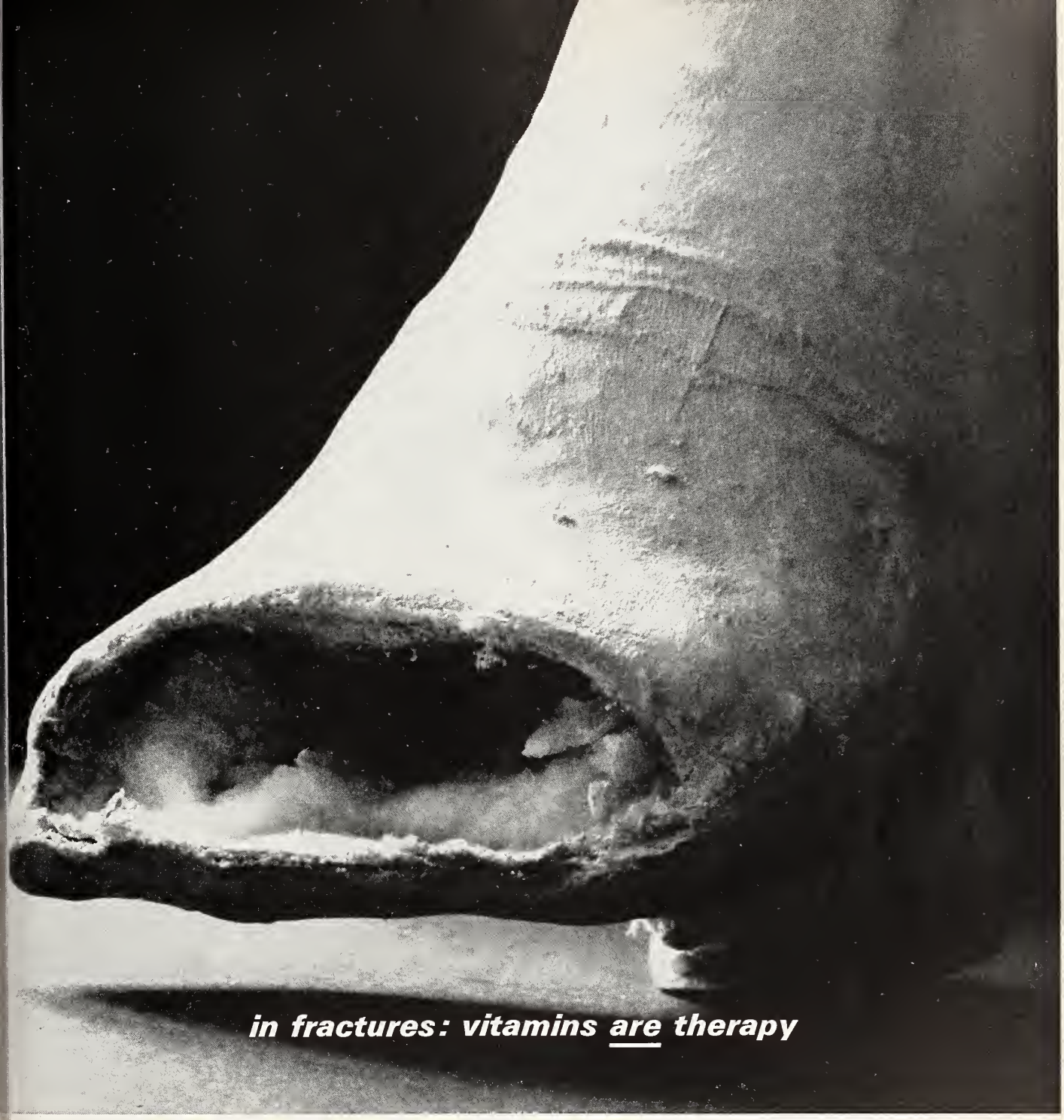
Opening Session

The delegates learned from a report by the American Medical Association Education and Research Foundation that one out of every ten medical students in the U. S. is now benefiting from the new student loan program. Since its inception nine months ago, the program has granted loans totaling more than nine million dollars to 3,042 medical students and 1,787 interns and residents, with applications being received at a rate of 150 per week. It also was announced that Merck Sharp & Dohme pharmaceutical company is making a second matching grant of $100,000 in support of the loan fund. The AMA-ERF also received contributions totaling $440,583 from physicians in five states for financial aid to medical schools.

Registration

Final registration at the meeting reached a total of 10,908, including 5,209 physicians. ◄

F. J. L. Blasingame, M.D.
Executive Vice President
American Medical Association



Few factors are more fundamental to tissue and bone healing than nutrition. Therapeutic allowances of B and C vitamins are important for rapid replenishment of vitamin reserves which may be depleted by the stress of fractures. Metabolic support with STRESSCAPS is a useful adjunct to an uneventful recovery. Supplied in decorative "reminder" jars of 30 and 100.

Each capsule contains:	
Vitamin B_1 (Thiamine Mononitrate)	10 mg.
Vitamin B_2 (Riboflavin)	10 mg.
Niacinamide	100 mg.
Vitamin C (Ascorbic Acid)	300 mg.
Vitamin B_6 (Pyridoxine HCl)	2 mg.
Vitamin B_{12} Crystalline	4 mcgm.
Calcium Pantothenate	20 mg.

Recommended intake: Adults, 1 capsule daily, or as directed by physician, for the treatment of vitamin deficiencies.

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Letters

to the editor

Springfield, Ill.
February 1, 1913

To the Editor:

The Illinois State Medical Society has arranged for an excursion to Panama by way of Key West, which, if not too late, might be of interest to some of the members of the Indiana State Medical Association who would like to go on this trip.

There will be a special train to Key West. The entire vessel sailing from Key West will be occupied by the party, and altogether the excursion promises to be most delightful.

As you know, the canal will be opened this fall, and this is probably the last opportunity anyone will have of seeing the most stupendous engineering and sanitary work of the age. If any of the members of the Indiana State Medical Association desire to join this party, please have them wire me at once, and we will send them particulars.

Please insert this in the next issue of your valued Journal.

The excursion will leave Saturday, March 1.

With best wishes, I am,

Yours very truly,
Geo. N. Kreider, M.D.
522 Capitol Avenue

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• Applicators

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To the Editor:

In order that your association can inform its members of current changes that directly affect them, we present below highlights of the new 7% Investment Credit provisions of the 1962 Revenue Act:

A direct reduction of an individual's income tax for 1962 and subsequent years is allowed up to 7% of the cost of equipment purchased after January 1, 1962. This 7% credit is applicable to sole practitioners, members of an association, partners and corporations. The credit, subject to limitations based upon total tax liability, is computed by multiplying the total cost of all equipment purchased during 1962 by 7% if the estimated useful life is eight years or longer.

A percentage of the cost (⅓ or ⅔) is subject to the credit if the estimated useful life is from four to eight years. Purchases of used equipment costing up to $50,000 per year qualify for the credit, and all new purchases qualify.

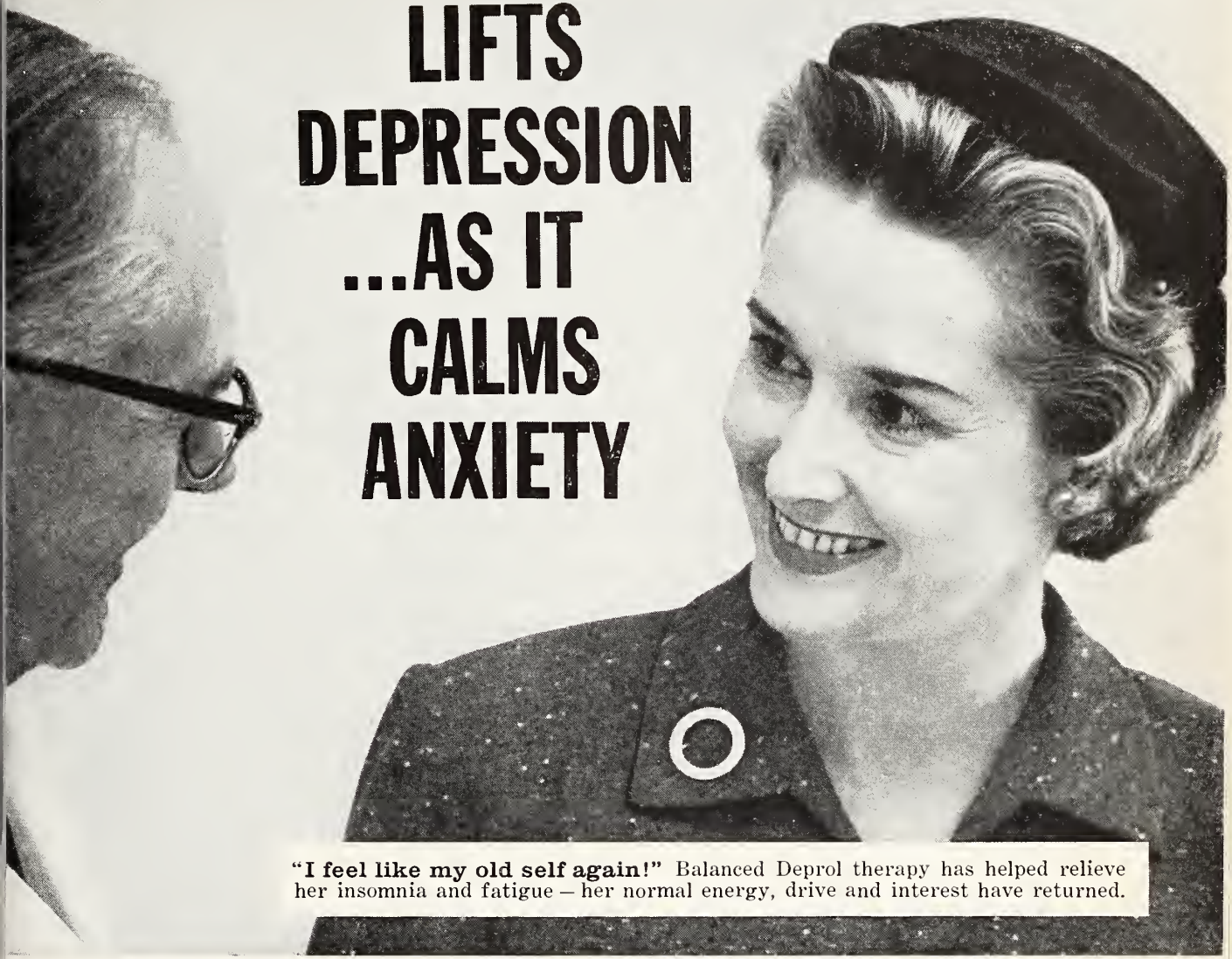
For purposes of depreciation, the cost of the equipment must be reduced by the amount of the allowable credit. Note that no proration is required; therefore, purchases in December will qualify for the 7% credit the same as purchases made last January.

The foregoing of necessity touches only upon the general provisions and cannot describe all the limitations nor answer specific questions that most certainly may arise. Please contact us if we can be of any assistance to you in this or any other tax matter.

Very truly yours,

R. E. Bixby
Wolf and Company,
Certified Public Accountants ◄

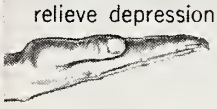
LIFTS DEPRESSION ...AS IT CALMS ANXIETY



"I feel like my old self again!" Balanced Deprol therapy has helped relieve her insomnia and fatigue – her normal energy, drive and interest have returned.

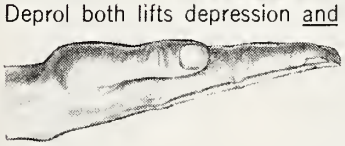
Brightens mood...relaxes tension

Energizers relieve depression





Deprol both lifts depression and calms anxiety





Tranquilizers reduce anxiety

CD-7393

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this may be increased gradually up to 3 tablets q.i.d. With establishment of relief, the dose may be reduced gradually to maintenance levels.

Composition: 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl) and 400 mg. meprobamate.

Supplied: Bottles of 50 light-pink, scored tablets.

Write for literature and samples.

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Annual Meeting Dates of Professional, Medical and Allied Organizations

INDIANA STATE SOCIETY OF ANESTHESIOLOGISTS
Date May 18
Place Student Union Building, I. U. Medical Center

BONE AND JOINT CLUB
Date April 17
Place The Athenaeum, Indianapolis

INDIANA ACADEMY OF GENERAL PRACTICE
Road Show
Date February 7
Place Hotel McCurdy, Evansville
Date March 6-7
Place Murat Temple, Indianapolis

INDIANA STATE ASSOCIATION OF MEDICAL ASSISTANTS
Board Meeting
Date February 3
Place Claypool Hotel, Indianapolis
Annual Convention
Date April 26, 27, 28
Place Claypool Hotel, Indianapolis

INDIANA NEUROPSYCHIATRIC ASSOCIATION
Date Second Wednesday of every month, October through May
Place Athenaeum, Indianapolis

INDIANA OBSTETRICAL AND GYNECLOLOGICAL SOCIETY
Date January 16
Place I. U. Medical School

INDIANA ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY
Date May 1-2
Place Culver Inn, Culver, Indiana

INDIANA ORTHOPAEDIC SOCIETY
Date May or June
Place Indianapolis

INDIANA ASSOCIATION OF PATHOLOGISTS
Date November 17
Place Methodist Hospital Conference Room

Annual Pathological Seminar
Date May 19
Place Veterans Administration Hospital

INDIANA PUBLIC HEALTH ASSOCIATION
Date April 24-25
Place Washington Hotel, Indianapolis

INDIANA ROENTGEN SOCIETY
Date First Sunday in May
Place Indianapolis, Indiana

AMERICAN COLLEGE OF SURGEONS, INDIANA CHAPTER
Date May 17, 18
Place Student Union Building Indiana University, Bloomington

INDIANA HOSPITAL ASSOCIATION
Date October
Place French Lick, Indiana

NORTHERN DISTRICT, INDIANA CHAPTER, AMERICAN PHYSICAL THERAPY ASSOCIATION
Date February 16
Place South Bend Memorial Hospital
Date March 16
Place Riley School, LaPorte
Date May 18
Place Ortho Manor, Fort Wayne



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Complete psychiatric treatment in an environment for cure. A 60 bed hospital with the most modern diagnostic and therapeutic equipment for the treatment of nervous and mental disorders.

LICENSED: Illinois Department of Mental Health

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Remember when handkerchiefs were used for stuffy or runny noses? *That was before Naldecon.* Naldecon lets your head-cold patient breathe the way he should. Through the nose. Honest relief that lasts up to 8 hours with one sustained-action tablet. (When you need it, even *half* a tablet retains the sustained-action feature.) The counterbalance between *two* antihistamines and *two* decongestants* usually gives excellent results—seldom causes overstimulation or sedation. Keep handkerchiefs for showing. Prescribe Naldecon.

*Each tablet contains phenylephrine HCl 10 mg., phenylpropanolamine HCl 40 mg., phenyltoloxamine citrate 15 mg., chlorpheniramine maleate 5 mg.—half in the outer layer, half in the sustained-action core. Each teaspoonful (5 cc.) of Naldecon Syrup contains the equivalent of one-half tablet.

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Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Osteopath Held Liable for Collapse of Patient's Lung—A New York trial court awarded a total of $9,000 against an osteopath who caused collapse of a patient's lung by injecting a hypodermic needle into her back and puncturing her lung. The patient was granted $7,500 for pain and suffering, for inability to take care of her household work or care for her infant child for several months, and for a scar on her chest which will be visible when she wears a bathing suit or an evening dress. Her husband, who is now divorced from the patient, was awarded $666.85 for loss of her services during her disability, and $833.15 for hospital and medical expenses.

The patient, an exceedingly thin woman, 28 years old, weighed only 98 pounds, although she was 5 feet 4½ inches in height. Immediately after the osteopath made an injection in her back, she suffered a collapsed lung. Hospital records indicated that a nerve block was being attempted. The osteopath denied that he punctured the lung and claimed that the collapse of the lung was a coincidence. Evidence showed that the osteopath was inexperienced in attempting a nerve block and that he had attempted to escape responsibility by showing in his office records that he had used a one-inch needle, which would ordinarily be too short to reach the lung. The court found that the negligence of the osteopath caused the injury.

The patient suffered considerable pain and was hospitalized for 16 days. She was given many drugs to alleviate the pain. An incision was made in the front part of her chest and a catheter was inserted to reinflate the lung. The catheter remained in her chest for approximately five days.

Erlichman v. Feldheim, 231 N.Y.S. 2d 390 (N.Y., July 6, 1962).

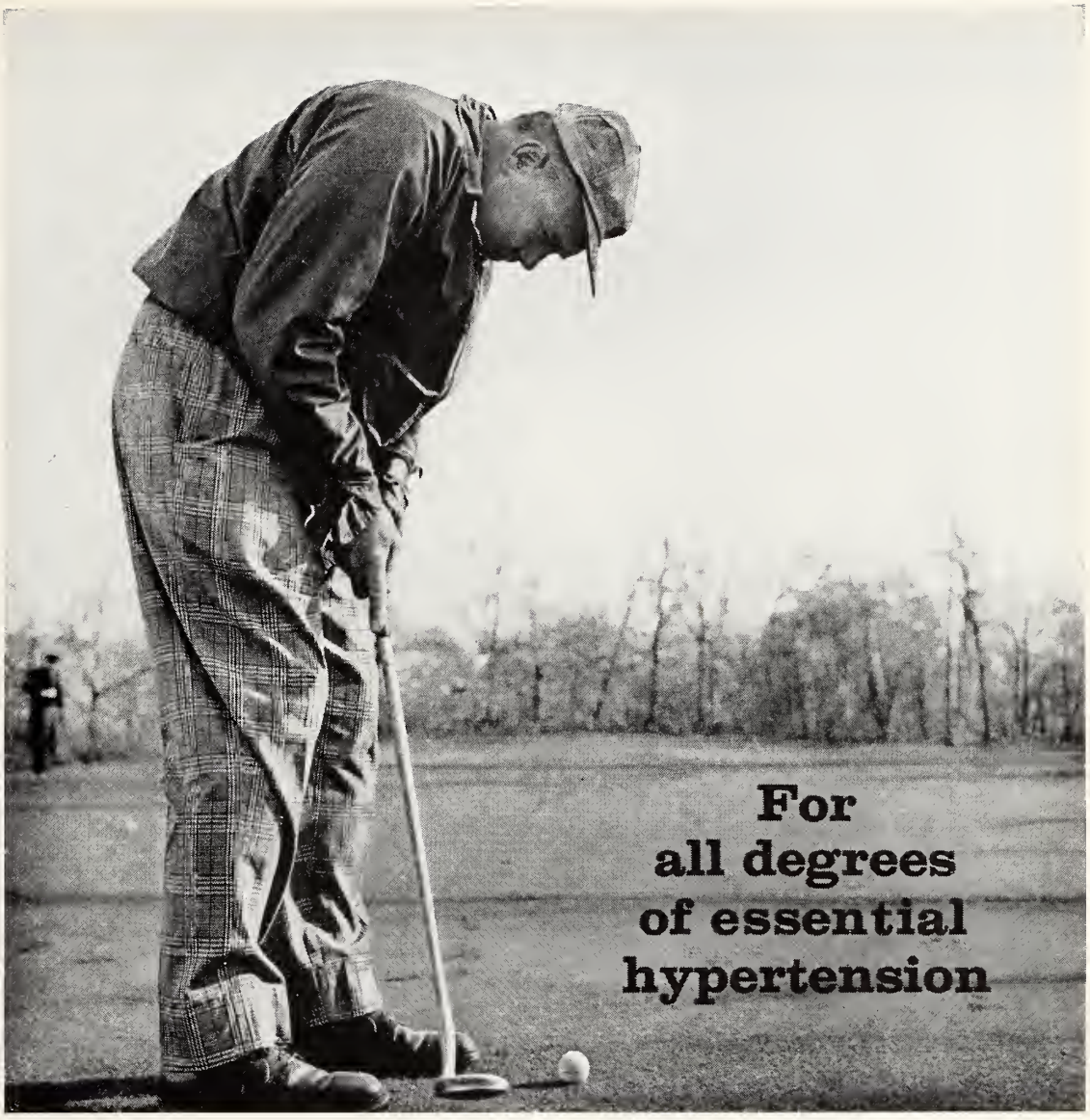
Doctor's License Revoked for Issuing False Medical Reports — Revocation of a doctor's license for issuing approximately 200 false medical statements for services rendered was sustained by a reviewing court in New York. There was no denial of guilt, but review was sought on the ground that the punishment was too harsh.

The doctor contended that he should be given consideration because he had cooperated with a judicial investigation of fraudulent medical claims. He pointed out that such consideration had previously been given to attorneys who had cooperated with the investigation.

The court acknowledged the general rule that the imposition of a penalty beyond the statutory minimum of censure and reprimand must be based either on the inherent nature of the violation or on a showing that the violation justifies more than a minimum discipline.

It held, however, that the evidence fully supported a finding that the doctor is not fit to be entrusted with the duties, responsibilities and obligations of a practicing physician. Since the matters offered in mitigation had been considered by the administrative agencies in reaching a decision to revoke the license, the court held that it would not interfere with the punishment imposed.

Goldstein v. Board of Regents of the University of the State of New York, 221 N.Y.S. 2d 174 (N.Y., Nov. 16, 1961). ◄



"relief of symptoms is striking with Rautrax-N"†

Rautrax-N decreases blood pressure for almost all patients with mild, moderate or severe essential hypertension. Rautrax-N also offers a new sense of relaxation and well-being in hypertension complicated by anxiety and tension. And in essential hypertension with edema and/or congestive heart failure, Rautrax-N achieves diuresis of sodium and chloride with minimal effects on potassium and other electrolytes.

Rautrax-N combines Raudixin (antihypertensive-tranquilizer) with Naturetin c̄ K (antihypertensive-diuretic) for greater antihypertensive effect and greater effectiveness in relief of hypertensive symptoms than produced by either component alone. Rautrax-N is also flexible (may be prescribed in place of Raudixin or Naturetin c̄ K) and economical (only 1 or 2 tablets for maintenance in most patients).

Supply: Rautrax-N — capsule-shaped tablets providing 50 mg. Raudixin, 4 mg. Naturetin and 400 mg. potassium chloride. *Rautrax-N Modified* — capsule-shaped tablets providing 50 mg. Raudixin, 2 mg. Naturetin and 400 mg. potassium chloride.

†Hutchison J. C.: Current Therap. Res. *2*:487 (Oct.) 1960.

For full information, see your Squibb Product Reference or Product Brief.

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Squibb Standardized Rauwolfia Serpentina Whole Root (Raudixin) and Bendroflumethiazide (*Naturetin) with Potassium Chloride

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Daniel R. Sullivan, 520 Stickney Ave., Toledo 11, Ohio—Partnership or Associate.

Harold Caboy, 13715 Terrace Rd., Apt. B 1, Cleveland, Ohio—also General Surgery.

John G. Sheedy, 100 Merrymeeting Rd., Brunswick, Maine—available August, 1963.

Alfredo Mayorga, 512 Sherman Ave., Evanston, Ill.

James L. Schamadan, 2871 Sky Harbor Blvd., Phoenix, Ariz.

James Patrick Moore, 1257 Lenape Ave., Ford City, Penn.
Frank H. McNutt, Box 407, Ford City, Penn.
} Wish to associate together

Robert J. Gagan, 1101 Eleventh Loop, Sandia Base, Albuquerque, N. Mex.

James J. Rinehart, 303 East Superior St., Chicago 11, Ill.

Fred F. Boling, U.S.P.H.S., Outpatient Clinic, 1520 Market St., St. Louis, Mo.

Berwyn H. Woodman, Trout Lake St., Edwards, N. Y.

William K. Hicks, 108 Prospect Park West, Brooklyn 15, N. Y.—Associate or Group.

William H. Johnson, 937 Sherwood Rd., LaGrange Park, Ill.

SPECIALISTS

Michael D. Orlando, 733 Bevis Rd., Columbus, Ohio—*Internal Medicine—Cardiology*

Richard C. Byron, 1192 Bryson Rd., Columbus, Ohio—*Internal Medicine*

Merrill W. Rusher, U. S. Naval Hospital, Bremerton, Wash.—*OB-GYN*

Edward M. Johnson, 1025 Drennan Park, Fort Campbell, Ky.—*OB-GYN*

Jack A. Peterson, 1652 Banks, Houston, Texas—*OB-GYN*

Leonard A. Goddy, 1125 Willow Ave., Louisville, Ky.—*Orthopedics*

Thomas C. Pagedas, 1100 West Michigan St., Indianapolis 7, Ind.—*Orthopedics*

Kenneth G. Hoffman, 9165 Poppleton Ave., Omaha, Neb.—*Pathology—Directorship*

David L. Silber, 70 Mackenzie Dr., Fort Leonard Wood, Mo.—*Pediatrics*

Lawrence J. Sholler, 22903 Gary Lane, St. Clair Shores, Mich.—*Pediatrics*

Eleuterio G. Lim, 6002 B. Green Meadow Parkway, Baltimore, Md.—*Radiology*

William D. Smith, 626 Convers Ave., Zanesville, Ohio—*General Surgery*

John M. Hartzell, Mayo Clinic, Rochester, Minn.—*General Surgery*

John E. Osborne, 10368 Springboro Pike, Miamisburg, Ohio—*General Surgery*

John M. Harper, Duke Hospital, Durham, N. C.—*Urology*

Carl J. Bjorklund, 916 Ninth Ave., N. W., Rochester, Minn.—*Physical Medicine and Rehabilitation*

LOCATIONS

Clinton County—MULBERRY—Population 1,000 with 2,000 in the surrounding area. Located 15 miles from Lafayette, home of Purdue University, and of two excellent, open staff hospitals. Combination home and office available. Dr. J. J. Lind who has practiced there for several years is leaving for a residency. For further details contact Dr. Lind, 135 South Main St., Mulberry, Ind.

Huntington County—MARKLE—Population approximately 800. Located 10 miles from Huntington, 13 miles from Bluffton and 22 miles from Fort Wayne where hospital facilities are available. Communities of Zanesville and Uniondale located close by do not have physician. Office of the late Dr. Halden C. Woods available. If necessary office and equipment and stock of drugs can be bought on contract. Bank of Markle will help a doctor get established. Contact Howard T. Anderson, vice-president and cashier of the State Bank of Markle or Mr. Paul W. Gause, Trust Department, Lincoln National Bank and Trust Company, Fort Wayne, Ind.

Jasper County—REMINGTON—Population 1,100. One physician in the town and he is willing to have another physician locate in the community. Nearest hospitals are located at Brook, Ind., and Rensselaer, Ind. For further information contact Mrs. Nettie R. Lambert, R. R. 1, Remington, Ind. ◄

Why You Should Support Blue Shield

(One of a series prepared by Blue Shield)

● Indiana Blue Shield is your plan. It was created by the Indiana State Medical Association to help solve payment problems of patient and doctor.

● Members' money goes for doctors' services—not for sales commissions, dividends or profits. In 1961, Blue Shield paid out 93 cents of each membership fee dollar received for doctors' services.

● Blue Shield furnishes sound protection to problem "over 65" and low income people —along with those whose need is not so great.

● The Blue Shield program for budgeting and prepaying medical care can help eliminate the demand for socialized medicine.

● Blue Shield features high speed direct payment through members to doctors for services.

● Blue Shield has the volume and procedural know-how to handle small claims at low cost, enabling even greater health protection to its members with first dollar coverage.

● Today almost one-third of the population of Indiana are members of Blue Shield. Since 1946 over $125,000 has been paid to members for doctors' services.

● The basic aims and goals of Blue Shield and doctors of Indiana are the same. They combine humanitarianism with self-reliance and independence. ◄

W. C. Huddlestone
Public Relations Division

ABSTRACTS

BOOK REVIEWS

CLINICAL APPLICATIONS OF CARDIOPULMONARY PHYSIOLOGY

M. Henry Williams, Jr., M.D. Paul B. Hoeber, Inc., 1960. 231 pages, 27 figures and six tables. $7.50.

This volume might classify as one of those unexpected bonuses that come the way of a reviewer. It is a completely unpretentious volume that makes for absolutely delightful, rewarding reading.

On the jacket there is a note stating that it is "a guide for clinical practice." Well, it is just that. There is no pretense of being an exhaustive monograph. Each little chapter does have, however, a selected bibliography for the physician curious to know more about the topic being discussed.

Dr. Williams has a really unique knack of presenting *his* thoughts on the topic he is considering. The result is the equivalent of an informal, bedside discussion. The general practitioner will find this a book he can pick up and read, a couple of pages at a time, practically at random. The general medical student and even the specialist will collect nuggets of ripe experience here and there even if much of the material is really on the elementary level.

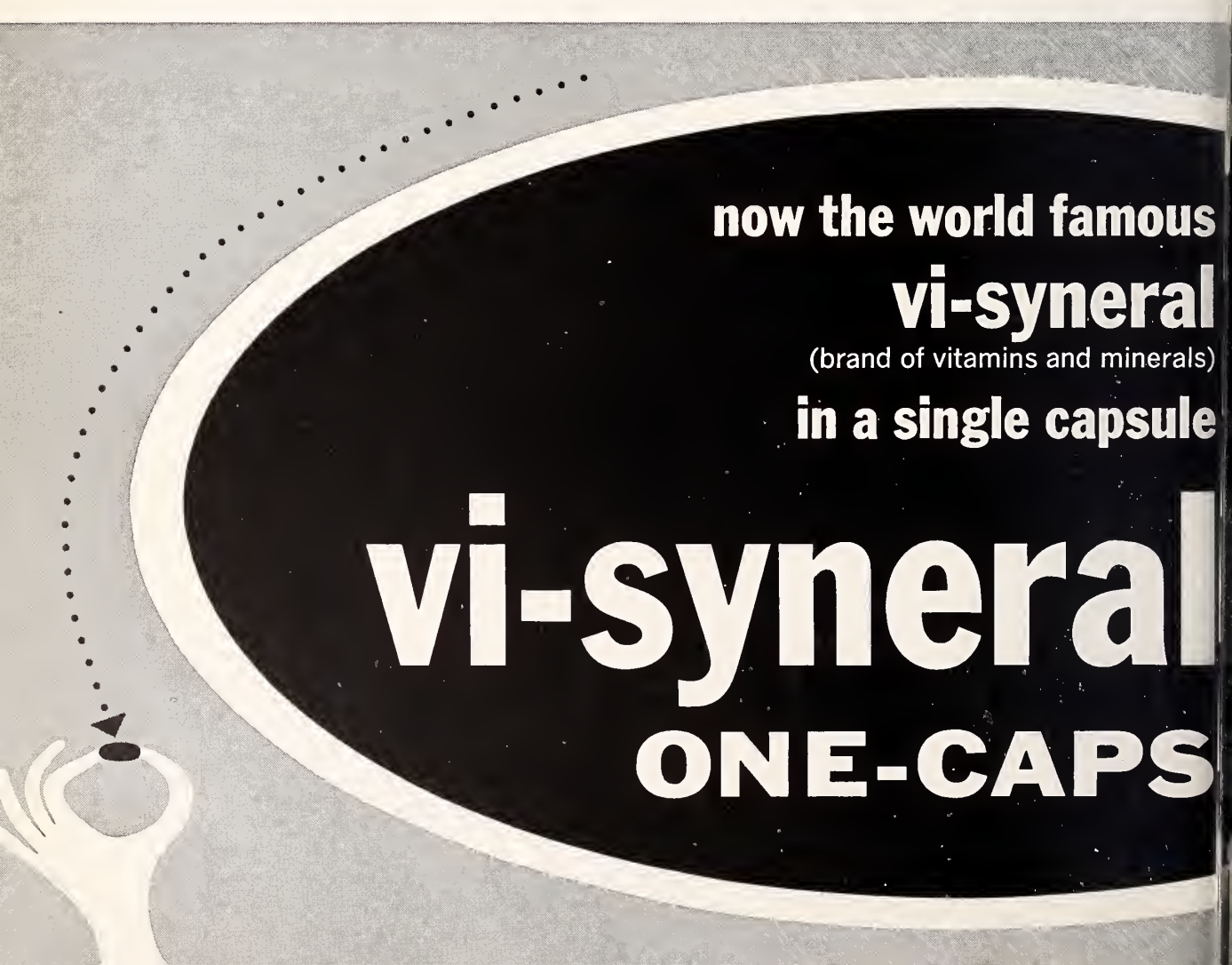
The price is not exorbitant, the binding fair and the type average. I certainly recommend this volume unconditionally as a book to keep on hand and peruse in those spare 15 minutes between cases or before going to sleep. Primers of this type are only too rare; I wish we had more of them.

Arnold Lieberman, M.D.
New York, N.Y.

DRUGS OF CHOICE 1962-1963

Walter Modell, M.D., Editor, C. V. Mosby Company, St. Louis, 941 pages, $14.50.

This, the third biennial edition, continues the original objective of presenting accepted drugs for a specific therapeutic action in a single chapter written by an accepted, often pre-eminent, authority with his critical evaluation and comparison of



available drugs and often modalities, and frequently with actual regimens for different clinical situations.

While there are a few new chapters and authors, many sections are unchanged. Indeed one can find consolation in the number of drugs whose order of choice has not changed in this last two year interval.

There have been changes, however, from a one to a two column page and in the paper, which isn't necessarily an improvement. The fairly extensive drug index, actually quite useful as a cross-index between generic names and trade names, has been continued.

New to the present edition is a listing at the beginning of each chapter of the drugs to be discussed, using both the descriptive and trade names.

While this book's principal value is in the office for hurried reference or memory-jogging many chapters can be read profitably as a sort of brain-duster in any single segment of medicine.

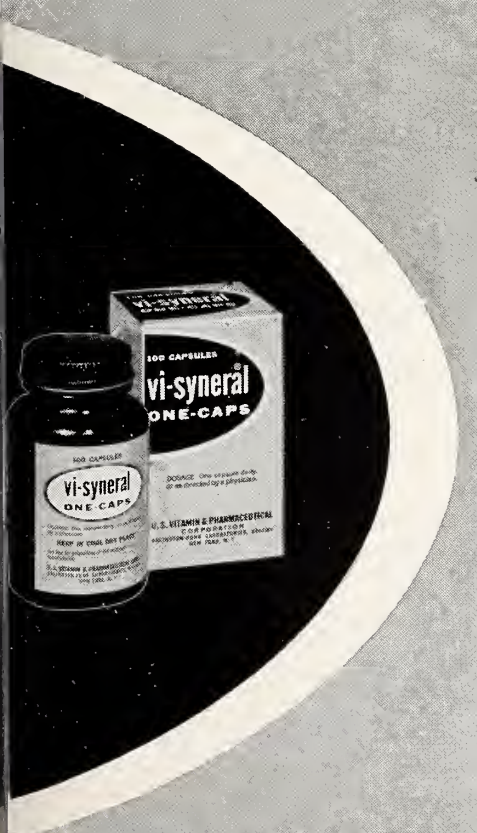
Stephen L. Johnson, M.D.
Evansville

DIFFERENTIATION BETWEEN NORMAL AND ABNORMAL IN ELECTROCARDIOGRAPHY

Ernst Simonson, M.D., C. V. Mosby Co., 1961. 328 pages, 74 figures, numerous tables and five appendices. $13.50.

Someone has to do the toilsome, unspectacular, unrewarding inspection of work previously done. Just what is "normal?" On page 27 of his painstaking analysis of the implications of this innocent question, Dr. Simonson shades, in the Figure 1 shown there, the area of possible error.

Several hundred references to works by leaders in the field buttress the author's statistical dissection of the scope of the considerations involved. This book will never be a best seller; I doubt if many G.P.'s or specialists will keep this volume on their desks. It is, however, a labor of love on the part of an acknowledged expert. As such, I'm sure, every life insurance company will make it required reading for their cardiological consultants. The writer discusses in painstaking detail the effects of biological (age, sex, race, etc.) and physiological (exercise, eating, smoking, etc.) variables.



TO HELP KEEP RECOMMENDATION OF DIETARY SUPPLEMENTS WHERE IT BELONGS, WITH THE PHYSICIAN

VI-SYNERAL ONE-CAPS offers a high quality product at an especially low price.

• one capsule-a-day dosage • costs your patient less than 3¢ per day

• small, easy to take • ethically promoted, sold through the pharmacy

Each **VI-SYNERAL ONE-CAPS** capsule provides:

VITAMIN A	6,000 U.S.P. Units	DICALCIUM PHOSPHATE	170 mg.
VITAMIN D	600 U.S.P. Units	(Calcium	50 mg.)
ASCORBIC ACID (C)	75 mg.	(Phosphorus	39 mg.)
THIAMINE MONONITRATE (B_1)	3 mg.	FERROUS SULFATE EXSICCATED	50 mg.
RIBOFLAVIN (B_2)	3 mg.	(Iron	15 mg.)
PYRIDOXINE HCl (B_6)	1 mg.	COPPER	1 mg.
NIACINAMIDE	20 mg.	IODINE	0.1 mg.
VITAMIN B_{12}	3 mcg.	MANGANESE	1 mg.
d, CALCIUM PANTOTHENATE	5 mg.	MAGNESIUM	1 mg.
VITAMIN E (d, alpha tocopheryl acetate)	1 Int. Unit	ZINC	1 mg.

Bottles of 28 and 100 capsules.

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This monograph gives the most exhaustive answer yet (and for some time to come) to just the question: what is the adult human EKG? Personally, I would have wanted a little more expatiation on current knowledge of the basis of the EKG —but then we cannot have everything within the limits of a single book.

Arnold Lieberman, M.D.
New York, N.Y.

Abstracts From Various Literature, Prepared by AMA

HERITABLE VARIATION IN THE Y CHROMOSOME

The normal Y chromosome in man has been described as shorter than, the same size as, or longer than the autosomes of the 21-22 group. Some of the reported variation in length may be due to differences of technic and interpretation, but heritable variation should be considered. In the family described, long Y chromosomes have been consistently demonstrated on different occasions, in different tissues and in specimens from related individuals. The observations on this family have shown that Y chromosome length is variable and heritable. A long Y chromosome is not necessarily associated with developmental anomaly.

Bishop, A., Blank, C. E., Hunter, H.: Heritable Variation in the Length of the Y Chromosome, *Lancet* (London) 2:18, July 7, 1962.



...THEY CAN WALK AGAIN

• Torpedoed on the Murmansk run —nearly frozen to death in an open boat—both legs lost below the knee—ex-Merchant Marines Michael McCormick and William Morris walked unaided in three weeks. They could look forward with certainty to leading a normal life again. To these men, as to thousands of other Hanger wearers, the phrase "Hanger is a symbol of help and hope" is a concrete truth proven by every day of their future lives.

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Fairfield at Pontiac, Fort Wayne, Ind.
416 N. Main St., Evansville, Ind.

TIRE AVULSION INJURIES

Tire avulsion injuries occur chiefly in pedestrians. As the wheels of the vehicle pass over the limb, the coefficient of friction between tire and skin, comparable to that between tire and road, causes movement of the skin along with the revolving tire. At the same time the limb is compressed. This combination of compression with movement of skin in a direction following the circumference of the wheel has three important sequels. A friction or abrasive burn may develop at the site of direct contact with the tire; the shearing effect of skin and subcutaneous tissue on the deep fascia results in the formation of a plane of cleavage at this site with or without rupture of the deep fascia and with or without breach of the skin surface; the leg and particularly the skin in contact with the irregular road surface is compressed. In a recent 18-month period at the Plastic Surgery Center, Queen Mary's Hospital, Roehampton, London, nine patients with lower limb avulsion injuries following motor accidents received treatment. Four were seen in the acute phase of injury; five presented with areas of skin necrosis some weeks after injury; the replaced avulsed skin flaps had proved nonviable. The principles of management of the local injury are: (1) no avulsed skin-fat flap no matter what its base, should be replaced as a flap; (2) all damaged skin in such skin-fat flaps should be excised and discarded; (3) the full extent of the injury must be surgically exposed; (4) incision of an intact deep fascial layer should be performed to allow decompression; (5) all nonviable muscle should be excised; (6) complete immediate skin cover should be obtained. A plea is made for adequate early treatment. Initial conservatism with its undesirable sequelae should be abandoned.

Pelly, A. D.: Management of Tire Avulsion Injuries, *Aust. New Zeal. J. Surg.* 31:275, May, 1962.

ORAL VACCINATION AGAINST POLIO

Three Sabin strains of poliovirus were fed sequentially in monovalent form, at one-month intervals, to a village population of 1,692 persons of all ages, including pregnant women. The use of live oral vaccine in a highly immune group has demonstrated its selective ability to immunize seronegative individuals. Both groups who failed to respond to Salk vaccine or lacked naturally acquired antibody showed over 90% conversion to all three poliovirus strains used. Type 1 virus was excreted for as long as four weeks after feeding. Type 3 virus continued to be excreted for eight weeks. Children under nine years of age, and in particular the group under four years, constituted the most active group of virus excreters. No evi-

Continued



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*Levin, S. J.: Pediat. Clin. North America 1:975, Nov., 1954.

NTz, Neo-Synephrine (brand of phenylephrine), Thenfadil (brand of thenyldiamine) and Zephiran chloride (brand of benzalkonium chloride, refined), trademarks reg. U.S. Pat. Off.

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dence could be found to indicate gross spread of poliovaccine virus to communities surrounding the area vaccinated, either during or after the vaccination period. No ill effects attributable to the vaccine were observed in the population either during or after the vaccination period. In the subsequent hot summer months, there was not a single suspected case of poliomyelitis in the area studied.

van Rooyen, C. E., Ozere, R. L.: Oral Vaccination Against Polio, *Canad. Med. Assn. J.* 86:1185, June 30, 1962.

CHROMOSOME CONSTITUTION IN CHRONIC MYELOCYTIC LEUKEMIA

The frequency of the Ph^1 chromosome in freshly aspirated marrow cells of 14 patients with typical chronic myelocytic leukemia (CML) processed by a "direct technic" without resort to culture or colchicine was significantly higher (greater than 75%) than that observed in the cultured blood cells (less than 35%) of the same subjects. The karyotypic abnormality of the abbreviated G-group chromosome would appear not to be related to therapy, since the frequency with which it occurred was not materially affected by treatment (including radiation). The Ph^1 chromosome was not observed in any of the metaphases of blood or marrow of 12 subjects who had developed a leukemia-like picture complicating either myelofibrosis, polycythemia vera, or myeloid metaplasia. A new chromosome abnormality, a shortened D-group chromosome, was observed with about the same frequency in the blood and marrow of a female with treated CML. This new karyotypic abnormality was associated with the highest frequency of the Ph^1 chromosome in cultured blood cells in the group studied. In four patients with an atypical picture of CML the Ph^1 chromosome was not observed in either marrow or cultured blood.

Sandberg, A. A., Ishihara, T., Crosswhite, L. H., Hauschka, T. S.: Comparison of Chromosome Constitution in Chronic Myelocytic Leukemia and Other Myeloproliferative Disorders, *Blood* 20:393, Oct., 1962.

NASOPHARYNGEAL CARRIERS OF STAPHYLOCOCCUS AUREUS

This study had the purpose of evaluating the influence of a nasal spray solution, containing neomycin and gramicidin, on the incidence of isolation of potentially epidemic phage (PEP) types of *Staphylococcus aureus* in nasopharyngeal cultures from carriers. The requirement for treatment with the nasal spray was to have four consecutive or almost consecutive nasopharyngeal cultures positive for one of the PEP types. Nurse carriers were classified as having a high, medium, or low frequency of positive nasopharyngeal cultures. In a two-year period, 30 nurses were treated. During the treatment, and during the following two months, there occurred a decrease in the incidence of detection of PEP types and an increase in the incidence of negative cultures. There was no evidence of any decrease in sensitivity of the strains of *Staph. aureus* to neomycin.

Cooper, M. L. et al.: Nasopharyngeal Carriers of Staphylococcus Aureus, *Amer. J. Dis. Child,* 104:53, July, 1962.

RELAPSE IN HEREDITARY SPHEROCYTOSIS WITH PROVEN SPLENUNCULUS

Hereditary spherocytosis in a girl of 19 had initially responded well to splenectomy, 12 years before. Clinical relapse was associated with the appearance of a retrogastric filling defect at barium meal, and the hematological picture of recurrence was present. By injecting Rh-sensitized red cells labeled with Cr^{51}, it was possible to demonstrate the presence of functioning splenic tissue in the left upper abdomen, and this was confirmed at operation by the finding of a large splenunculus in the lesser sac of the peritoneum. After the removal of this there was remission.

Mackenzie, F. A. F., Elliot, D. H., Eastcott, H. H. G., Hughes-Jones, N. C., Mollison, P. L.: Relapse in Hereditary Spherocytosis with Proven Splenunculus, *Lancet* (London) 1:1102, May 26, 1962. ◄

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TAPES OF THE MONTH

CARDIOVASCULAR

CV-547 **CONCEPTS OF CEREBRAL VASCULAR ACCIDENTS**—Ephraim Roseman, M.D., Louisville, Ky. Recorded: Kentucky State Meeting, Date: Sept. 21, 1961. Time: 35 minutes.

OBSTETRICS AND GYNECOLOGY

OG-782 **OBSTETRICAL EMERGENCIES** — Conrad G. Collins, M.D., New Orleans, La. Recorded: Kentucky State Meeting. Date: Sept. 19, 1961. Time: 25 minutes.

GENERAL

G-1201 **SIGHT SAVING MEASURES FOR GENERAL PRACTITIONERS**—Alston Callahan, M.D., Birmingham, Ala. Recorded: Kentucky State Meeting. Date: Sept. 20, 1961. Time: 25 minutes.

TREATMENT

T-3051 **LABORATORY DIAGNOSIS OF INFECTIOUS MONONUCLEOSIS** — Walter A. Ricker, M.D., Seattle, Wash. Recorded: Kentucky State Meeting. Date: Sept. 20, 1961. Time: 25 minutes.

T-3052 **PANEL DISCUSSION ON "TRAUMA"** — Alston Callahan, M.D., Birmingham, Ala.; Garrett Pipkin, M.D., Kansas City, Mo.; Virgil A. Plessinger, M.D., Cincinnati, Ohio; Jerome F. Wiot, M.D., Cincinnati, Ohio; Charles G. Child III, M.D., Ann Arbor, Mich. Recorded: Kentucky State Meeting. Date: Sept. 20, 1961. Time: 50 minutes.

T-3053 **ROENTGEN FINDINGS IN OBSTRUCTED DIAPHRAGMATIC HERNIA** — Jerome F. Wiot, M.D., Cincinnati, Ohio. Recorded: Kentucky State Meeting. Date: Sept. 19, 1961. Time: 32 minutes.

SURGERY

S-4024 **ABDOMINAL INJURIES**—Charles G. Child III, M.D., Ann Arbor, Mich. Recorded: Kentucky State Meeting. Date: Sept. 20, 1961. Time: 25 minutes. ◄

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From insurance risk to a practically unknown entity in medicine is quite a record for the relatively few intervening years between then and now. The reasons are not hard to come by. Diagnostic techniques have improved enormously, as has the quality of medical education. And, we submit, so has the quality of the medicines which have become available.

Yet, the value of independent drug research has been seriously challenged – research which has produced the chemotherapeutic compounds which make the *cure* of mastoiditis practically a routine, not even a worrisome, procedure. True, the cost may run as high as $15.00. Yet, ask the man who paid $1,000.00 for his mastoid scar which he would have preferred – if he had had the choice.

*Asherson, N., "Acute Otitis and Mastoiditis in General Practice," H. K. Lewis & Co., Ltd., London, 1934.

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"Phenylketonuria Mental Deficiency Can Be Prevented" is the subject of a medical motion picture film produced by Dr. Harry Waisman of Wisconsin and furnished without charge by Ames Company, Elkhart, Indiana, to medical groups and organizations. It is a 14½ minute, black and white, 16 mm. sound film. Requests may be directed to the Medical Film Department of Ames.

Indiana Winner in "Ability Counts" Contest Will Win Trip to Washington

The 15th annual national "Ability Counts" contest is announced for eleventh and twelfth grade students. Students are asked to investigate how handicapped workers in their communities are proving that "ability—not disability—counts."

After they have obtained facts from field trips and investigation, they are to write a report on the theme "How My Community Benefits from the Abilities of Handicapped Workers." Both state and national winners receive cash awards.

The first place Indiana winner will receive a round trip to Washington with all expenses paid. All contest entries are due at the Indiana State Board of Health by February 15.

Dr. Benjamin Drompp, a native of Logansport, has become the professor and head of the Division of Orthopedic Surgery at the University of Arkansas in Little Rock. It is believed that Dr. Drompp is the first physician from Logansport to become the head of a medical school department.

New Cancer Detection Teaching Film, Booklets Available to Physicians

A new teaching film for medical audiences, "Cancer Detection: Proctosigmoidoscopy in Office Practice" is now on loan, without charge, from the C. B. Fleet Company. The film is color-sound, 16 mm. and runs for 15 minutes. A supply of informational booklets accompanies the film.

Applications for loan of the film may be made to the company at 921 Commerce St., Lynchburg, Virginia. Three choices of dates should be given and the estimated number in the audience should be mentioned in order that the booklet supply may be adequate.

Dr. Joseph E. Walther of Indianapolis has been elected a trustee of the American College of Gastroenterology. He was selected at the annual meeting in Chicago. Dr. Joseph E. Lang is the newly elected governor of the college for Indiana.

"Immunization Information for International Travel" Booklet Out

The latest edition (1962) of "Immunization Information for International Travel," published periodically by the Public Health Service, is now available for distribution. The booklet may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D.C. at 35 cents per copy.

Two New Booklets of Interest To Physicians in Athletic Field

Mead Johnson Laboratories have printed two booklets of interest to physicians in the athletic field. A 14-page pamphlet "Football Injuries" is available free to team physicians. It discusses prevention, detection

and treatment of all common injuries; also gives forth on physical conditioning and heat exhaustion.

Another pamphlet, "The Liquid Pre-Game Regimen" discusses the use of Sustagen in providing liquid meals before games. Physicians may write to Professional Services Department, Mead Johnson, Evansville 21.

Safety Research Awards Presented By Metropolitan Life Insurance Company

Awards for safety research were given recently by the Metropolitan Life Insurance Company to two engineers. Dr. William B. Kouwenhoven, an electrical engineer at Johns Hopkins was presented the Award of Honor and $1,000 for his work in building a portable electrical defibrillator. If electrocuted persons and others who develop ventricular fibrillation can be maintained with an oxygen carrying circulation by use of closed chest resuscitation and artificial respiration, many of them may be defibrillated by use of the portable apparatus. Accidental electrocution kills about 1,000 people each year in the United States. Many cases of ventricular fibrillation from natural causes may also be amenable to this treatment.

B. F. K. Mullins of the Engineering Graphics Department of Texas A. and M. was given the Award of Merit and $500 for his investigation "Freeway Traffic Accident Analysis and Safety Study." Professor Mullins sought to determine the relationship of accidents to specific design features such as ramps and interchange intersections. His report on 10,000 freeway accidents will be useful in designing safety into future highway and freeway construction.

Donald V. Brown, Ph.D. has been appointed chief of the research statistics division of the Veterans Administration. Dr. Brown obtained his Ph.D. degree from Purdue University in 1955, served as a trainee in psychology at the Marion, Indiana VA Hospital, and became an instructor in psychology at Indiana University School of Medicine. ◄

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FUTURE MEETINGS, SEMINARS, COURSES

American Industrial Health Meeting in Washington This Year

The 1963 American Industrial Health Conference will be held March 18-21 in Washington, D. C. The Conference is comprised of the annual meetings of the Industrial Medical Association and the American Association of Industrial Nurses. Further information may be obtained from the American Industrial Health Conference, 55 East Washington St., Chicago 2, Ill.

American Board Ob-Gyn Part II Oral and Clinical Exams Scheduled

The next scheduled examination (Part II), oral and clinical, will be conducted for all candidates at the Edgewater Beach Hotel, Chicago, Ill., by the entire Board, April 29-May 4. Formal notice of the exact time of each candidate's examination will be sent him in advance of the examination dates.

Candidates who have participated in the Part I examination will be notified of their eligibility for the Part II examination as soon as possible.

For further information, contact Robert L. Faulkner, M.D., secretary, 2105 Adelbert Rd., Cleveland 6, Ohio.

American College of Allergists Offers Instructional Course and Annual Congress

The American College of Allergists Graduate Instructional Course and 19th Annual Congress has been set for March 24-29, Americana of New York, New York City. For further information, write to John D. Gillaspie, M.D., treasurer, 2141 14th St., Boulder, Colorado.

Gill Memorial Eye, Ear and Throat Hospital Announces Spring Congress

The Gill Memorial Eye, Ear and Throat Hospital has announced its 36th annual Spring Congress in Ophthalmology and Otolaryngology April 1-5. For further information write Superintendent, P.O. Box 1789, Roanoke, Va.

Canadian-American Medical and Dental Ski Association's Final Meeting

The final meeting of the Canadian-American Medical and Dental Ski Association will be March 4-6 at Iroquois Mountain, Brimley, Mich. Address inquiries to T. J. Trepasso, M.D., 816 Ashmun St., Sault Ste. Marie, Mich.

Tenth Annual Postgraduate Course Offered by Cleveland Educational Clinic

The Cleveland Clinic Educational Foundation is offering its tenth annual day and one-half postgraduate course February 6-7 this year.

The varied subjects to be presented are of general current interest. Due to limitation of auditorium capacity, registration will be limited to 150. Acceptances will be made in the order of receipt of applications. Registration fee is $20.00.

Further information may be obtained by writing the Education Secretary, Cleveland Clinic Educational Foundation, 2020 E. 93rd St., Cleveland 6.

New Orleans Graduate Medical Assembly Plans 26th Annual Meeting March 4-7

The New Orleans Graduate Medical Assembly will hold its 26th annual meeting on March 4 to 7, in the Roosevelt Hotel. An excellent faculty of distinguished authorities will conduct some 56 discussions on many topics of clinical interest. The registration fee is $20.00.

A clinical tour to Mexico from March 8 to 23 is planned with sightseeing and medical programs. Full particulars may be obtained by writing the Medical Assembly, 1430 Tulane Ave., New Orleans 12.

Fourth Annual Congress of the Professions to Meet Next Month

Members of eight professions will attend the Fourth Annual Congress of the Professions in Lansing, Michigan on February 8 and 9. Originally formed as the Michigan Association of the Professions, the organization, which represents and is composed

of members of the professions of architecture, education, engineering, dentistry, medicine, law, pharmacy and veterinary medicine, has developed a national aspect during the past few years.

Representatives from fifteen of the states will attend the coming meeting. Heads of the national professional organizations will headline the two-day program. Information may be obtained by writing to Congress of the Professions, 120 W. Saginaw St., East Lansing, Michigan.

Postgraduate Course in Management Of Behavior Disturbances Offered

A postgraduate course in "Growth and Development—Management of Common Behavior Disturbances" will be held at the Medical College of Georgia in Augusta, Georgia, February 12, 13 and 14. Disturbances commonly encountered in infants, children and adolescents will be discussed from symptomatic, diagnostic and therapeutic points of view.

Registration will be limited to a small group to facilitate close faculty participation. The American Academy of General Practice allows 18 hours credit. Registration fee is $50.00. Contact Dr. Claude-Starr Wright, Medical College of Georgia, for further information.

Tuberculosis Refresher Course Will Be Presented January 23rd

A comprehensive review of the latest knowledge in the field of tuberculosis will be offered Indiana physicians during a postgraduate symposium scheduled for January 23rd at the I. U. Medical Center. The Indiana Tuberculosis Association is cosponsoring the refresher course with the Indiana University School of Medicine and the Indiana State Board of Health. Funds for bringing guest speakers, expert in their fields, to the symposium have been contributed by Gamma Nu Sorority, WBA.

The Indiana University School of Medicine staff will be represented by Dr. Ralph Wilmore, speaking on "Chemotherapy of Tuberculosis" and by Dr. Arvine Popplewell, superintendent of Marion County General Hospital, who will discuss "Prophylaxis."

Brochures giving all details of this medical educational opportunity will be circulated to physicians soon. All physicians are urged to take advantage of this important refresher course.

Mayo Clinic Sets Two Identical Sessions of 1963 Clinical Reviews

The staff of Mayo Clinic and the faculty of the Mayo Foundation for Medical Education and Research are again presenting Clinical Reviews next spring on March 11, 12 and 13 and March 18, 19 and 20. Because of the large number attending in past years they are presenting two identical sessions on successive weeks in 1963 as was done in 1962.

Clinical Reviews is acceptable for 25 hours of Category I credit by the American Academy of General Practice and the College of General Practice in Canada. Registration fee is $10. Those wishing to attend should contact Mr. M. G. Brataas, Mayo Clinic, Rochester, Minn., and should indicate which session they prefer. ◄

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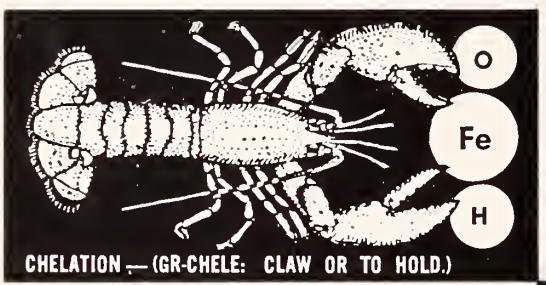
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Division of Postgraduate Medical Education of the I. U. School of Medicine

Tentative list of Postgraduate Courses for 1963. All courses unless otherwise indicated will be held at the I. U. Medical Center.)

January 16 and 17, 1963	Psychiatry
January 23, 1963	Tuberculosis
February 20, 1963	Orthopedics
February 21, 1963	Ophthalmology for the General Practitioner
March 13 and 14, 1963	Obstetrics and Gynecology
March 20 and 27, 1963	Psychiatry (at Bedford)
March 25 to April 6, 1963	Anatomical and Clinical Otolaryngology
April 10 and 11, 1963	Clinical Heart Disease
April 17 to 21, 1963	Diagnostic Radiology
April 24 and May 1, 1963	Psychiatry (at South Bend)
May 15 and 22, 1963	Psychiatry (at Lawrenceburg)
May 15, 1963	Medical Treatment of Malignancy
May 16, 1963	Medical Problems in Renal Disease



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Zinc (as Zinc Betoine Citrate)	1.25 mg.
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INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—November, 1962

Disease	Nov. 1962	Oct. 1962	Sept. 1962	Nov. 1961	Nov. 1960
Animal Bites	526	603	931	389	394
Chickenpox	367	128	69	164	169
Conjunctivitis	85	41	39	48	43
Diphtheria	0	1	1	0	1
Dysentery, Unspecified	46	37	48	32	35
Impetigo	151	153	202	153	145
Infectious Hepatitis	55	66	54	111	86
Infectious Mononucleosis	20	6	15	10	13
Influenza	1351	957	599	544	618
Measles (Rubeola-Rubella)	140	77	57	141	169
Meningitis, Meningococcal	2	1	1	2	0
Meningitis, Other	10	13	3	4	6
Mumps	188	55	57	114	186
Pertussis	72	36	101	3	11
Pneumonia	148	75	61	142	134
Poliomyelitis	4	5	8	4	21
Streptococcal Infections	321	278	297	295	272
Tinea Capitis	12	14	0	29	17
Tuberculosis (Active)	110	121	179	63	not Available

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Deaths

John T. Bolin, M.D.

Dr. John T. Bolin, 82, former Hammond and Cedar Lake resident, passed away Oct. 29 on his farm in Cedar Lake.

Dr. Bolin, who moved to Mountain Home, Arkansas about six years ago, had been visiting in Cedar Lake to dispose of property he owned there. A senior member and member of the ISMA 50-Year-Club, Dr. Bolin had been on the staff of St. Margaret Hospital for about 44 years. He was a graduate of the University of Louisville and a member of the Lake County Medical Society.

L. J. Danieleski, M.D.

Dr. Ladislaus J. Danieleski, prominent Gary physician, died Nov. 24 after an illness of several weeks.

Dr. Danieleski, 64, was a staff member at Methodist and Mercy Hospitals and served two terms as president of the Mercy Hospital board. He interned at Mercy in 1924 and 1925 and had been practicing medicine in Gary since that time. The 64-year-old general practitioner was a graduate of General Medical College in Chicago and a member of the Lake County Medical Society.

W. D. Gerrish, M.D.

Dr. Wakefield D. Gerrish, former director of the x-ray department at Vermillion County Hospital, died Nov. 23 in Union Hospital, Terre Haute.

Dr. Gerrish, 83, was a member of the ISMA 50-Year-Club and the Parke-Vermillion County Medical Society. He was a graduate of Indiana University School of Medicine and established his general practice in Clinton in 1902. He retired in 1959.

William A. Holloway, M.D.

Dr. William A. Holloway, a practicing physician in Cass County for 62 years, died Nov. 18 at Memorial Hospital, Logansport. He was 92.

Dr. Holloway first came to Logansport in 1893 to begin the practice of medicine. Although Dr. Holloway was always a general practitioner, he specialized in obstetrics.

Dr. Holloway attended Indiana University for two years, then was graduated from the Bellevue Hospital Medical College in New York. He was on the staffs of Memorial and St. Joseph's Hospitals before retiring in 1955. Dr. Holloway was a member of the Cass County Medical Society.

Walter S. Pollard, M.D.

Dr. Walter S. Pollard, 79, passed away Nov. 5 at Baptist Hospital, Evansville, after a short illness.

Dr. Pollard, a member of the ISMA 50-Year-Club, was graduated from Northwestern University in 1907 and received his medical degree from the University of Illinois School of Medicine in 1911.

He was a member of the Vanderburgh County Medical Society.

Jancy S. Slabaugh, M.D.

Dr. Jancy S. Slabaugh, 88, a practicing doctor at Nappanee for over 50 years, died Nov. 18 in the Elkhart General Hospital of injuries suffered in a car accident.

Dr. Slabaugh was graduated from the Hahnemann Medical School, Chicago. A member of the ISMA 50-Year-Club and the Elkhart County Medical Society, Dr. Slabaugh went to Nappanee after graduation from medical school and practiced there until the auto accident. Dr. Slabaugh was president of the Bluffton (O.) College Board of Trustees for 25 years and chairman of the board for the past 13 years.

Halden C. Woods, M.D.

Dr. Halden C. Woods, Huntington, was found dead in his wrecked auto Nov. 7, three weeks after he disappeared.

Friends of Dr. Woods found the body in a deep ravine seven miles west of Huntington. The doctor had not returned home after making an emergency call in that area Oct. 16. The 48-year-old physician was a native of Allen County and had been practicing at Markle since 1938. He was graduated from the Indiana University School of Medicine in 1937, and was a member of the Huntington County Medical Society. ◄

County News

Allen

Dr. John H. Mayer spoke on "Fluid Retention, Clinical Evaluation and Associated Programs" before the 110 members and guests at the Nov. 6 meeting of the Allen County Medical Society.

Bartholomew-Brown

Major Cloyd, U. S. Army, was the principal speaker at the Nov. 14 meeting of the Bartholomew-Brown County Medical Society. There were 20 members present.

Cass

The Cass County Medical Society met Dec. 3 at the Ben Hur Motel. The 22 members present heard Dr. Eugene L. Hedde speak on "A Tour of Medical Facilities in the Orient."

Decatur

Eleven members of the Decatur County Medical Society met Nov. 16 at the Decatur County Hospital. The main topic of discussion was possible action to head off socialization of medicine.

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Delaware-Blackford

Dr. Stewart D. Brown, Albany, has been elected president of the Delaware-Blackford County Medical Society for the coming year. Other newly elected officers include Drs. Donald R. Taylor, Muncie, secretary; Lawrence D. Benken, Muncie, treasurer; Thomas M. Brown, Glynn A. Rivers, Dean Jackson, delegates and Donald R. Taylor, Warren L. Bergwall and Edward F. Wierzalis, alternates.

Elkhart

Members of the Elkhart County Medical Society elected the following officers at their Dec. 6 meeting: Drs. E. L. Fosbrink, president; Frederick W. Bigler, vice-president; Page E. Spray, secretary-treasurer; Carlos Mendez and John P. Turner, delegates and Edward G. Dovey and Thomas J. Quilty, alternates.

Dr. Robert Christian, Ph.D., spoke on the subject of "Boredom" at the meeting. Dr. Christian is an associate professor in the department of English at Notre Dame.

Floyd

Dr. A. C. Offutt discussed "Public Health" with the 26 members of the Floyd County Medical Society present at the Nov. 9 meeting. Plans were made to ask their senator, representative and the Corydon doctors to attend the December meeting.

Gibson

Field Secretary Robert Amick discussed actions of Congress and the coming session of the Indiana General Assembly with the 13 members of the Gibson County Medical Society meeting Nov. 14.

Grant

Newly-elected officers of the Grant County Medical Society are Drs. William A. Koontz, president; M. Arthur Grant, president-elect; E. S. Rifner, secretary-treasurer; Robert M. Brown, delegate and William A. Roll, alternate.

Jasper-Newton

Field Secretary Howard Grindstaff discussed possible legislation in the 1963 Gen-

eral Assembly with members of the Jasper-Newton County Medical Society at their Nov. 14 meeting. There were seven members present.

Jefferson-Switzerland

Twenty members of the Jefferson-Switzerland County Medical Society met Nov. 6 with Field Secretary Robert Amick. They discussed Congress and the problems facing medicine today.

Lake

Dr. Donald C. Harrington, president of the San Joaquin County Foundation for Medical Care in California, spoke to the 150 members and guests of the Lake County Medical Society meeting Nov. 28. His topic was "Operation of the San Joaquin Foundation."

Marshall

Elected as officers for 1963 by the Marshall County Medical Society are Drs. Louring W. Vore, president; James S. Robertson, vice-president; J. Kent Guild, secretary-treasurer; Russell R. Hippensteel, delegate and Donald W. Reed, alternate.

Montgomery

Dr. Donald Rogers spoke on the topic of "Common Pediatric Problems" before the Nov. 15 meeting of the Montgomery County Medical Society. Nineteen members were present.

Orange

The Orange County Medical Society has elected Dr. Charles X. McCalla president and Dr. Phillip T. Hodgin secretary-treasurer for the coming year. Dr. Hodgin will serve as delegate and Dr. McCalla, alternate.

The new officers were elected at a Dec. 4 meeting. Nine members attended the meeting.

Starke

Dr. Clark McClure is the newly elected president of the Starke County Medical

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Society. Assisting him will be Drs. Howard J. Henry, vice-president; Earl R. Leinbach, secretary-treasurer; Guy B. Ingwell, delegate and Dr. McClure, alternate.

Wayne-Union

Serving as 1963 officers of the Wayne-Union County Medical Society are Drs. Charles V. Sage, president; Charles E. Kime, president-elect; Harold L. Miller, secretary; Edward D. Plasterer, treasurer; Glen Ward Lee and Clarence G. Clarkson, delegates and Tom S. Shields and James F. Lewis, alternates.

Whitley

The Whitley County Medical Society met Nov. 13 at the Whitley County Memorial Hospital. Drs. Thomas G. Hamilton and C. Jules Heritier reported on ISMA convention activity. ◄

"A Crab Ain't Got No Sense"

We have been publishing frequently a quote from Nikita Khrushchev.

This month we can tell the story in another way, quoting Dr. Thomas W. Goodwin, President of the Medical Association of Georgia, discussing the King-Anderson Bill:

"Not long ago I was visiting down on the coast. One afternoon I went into the kitchen where the cook was boiling some crabs. During the course of the conversation, the cook, an old Gullah Negro, said to me, 'Doctuh, a crab ain't got no sense.' 'What do you mean?', I asked. 'Well,' she says, 'Efn yo tek a live crab and drap him in a bucket of bilen water, he'll scramble and fight t'well he gits outen de bucket. But, efn yo tek dat same crab and put him in a bucket of cold water and sot it on de stove, and turn on de heat kinda gradual like, yo kin bile him alive an he won't never know wat hoppen.'"

Reprinted from the Journal of the Medical Association of Georgia, June, 1962.

Association News

EXECUTIVE COMMITTEE

November 27, 1962

The Executive Committee of the Indiana State Medical Association met in room 1031 of the Biltmore Hotel, Los Angeles, at 7:30 a.m. on November 27, 1962, with the following members present: Wendell E. Covalt, M.D., chairman; Maurice E. Glock, M.D.; Don E. Wood, M.D.; Kenneth O. Neumann, M.D.

James A. Waggoner, executive secretary.

Headquarters Office

The secretary referred to the committee a request from Dr. Robert P. Acher concerning the use of the headquarters building for a meeting of the Indiana Division of the American Cancer Society. Upon motion of Drs. Wood and Glock, the question of the use of the building for meetings of other organizations is to be referred to the Council.

Treasurer's Office

The treasurer's prepared report was presented to the committee and it was accepted by consent.

Organization Matters

The request of Michael Reese Hospital, Chicago, for use of the mailing list of the Association was approved by consent.

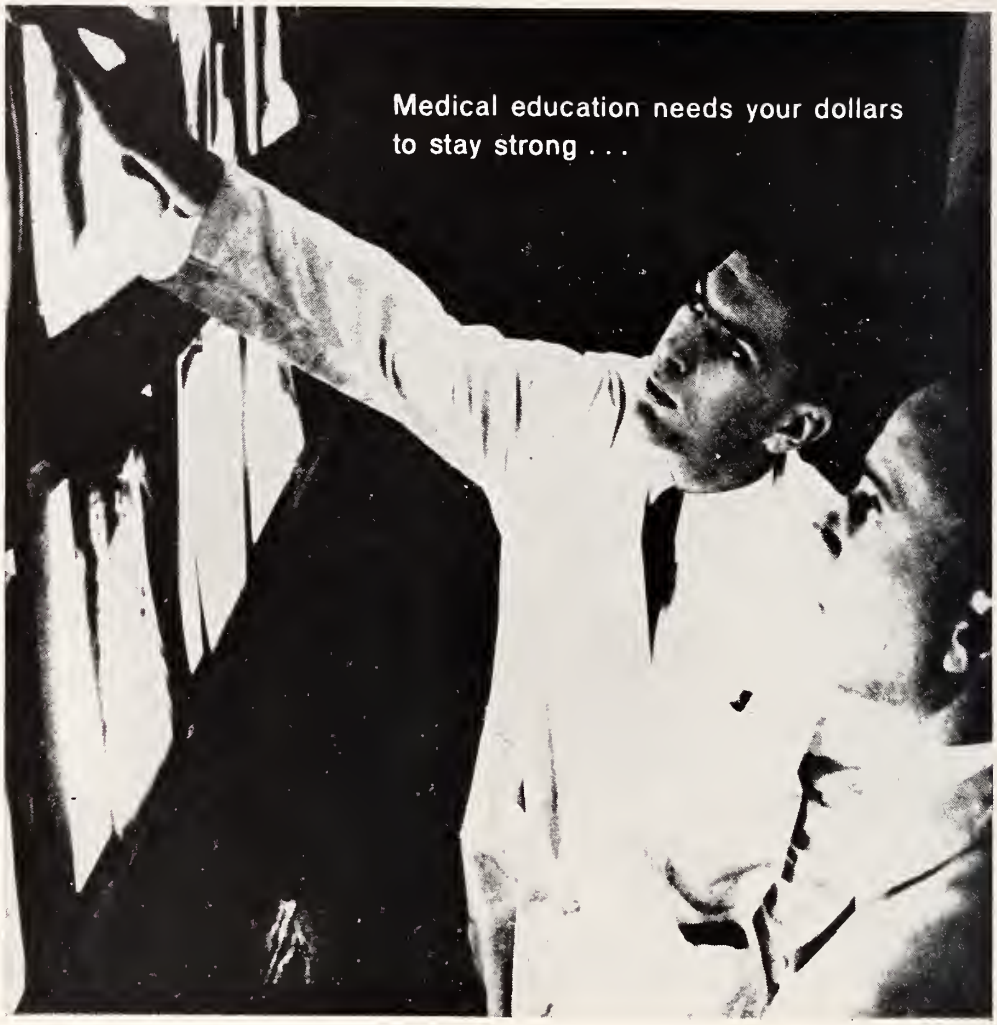
A letter from the Illinois State Medical Society concerning the candidacy of Dr. Walter C. Bornemeier of Chicago for Vice Speaker of the AMA House of Delegates was read for the information of the committee.

Letter from the Massachusetts Medical Society concerning the candidacy of Dr. Norman A. Welch for President-elect of the American Medical Association was read for the information of the committee.

The secretary was instructed to immediately adopt a policy of sending a newspaper release to local newspapers listing the names of physicians who had been appointed to the various commissions and committees of the Indiana State Medical Association.

The president presented a letter from Dr. Norman Booher concerning an invitation which he had received to appear before the Shipman Committee of the AMA at a meeting to be held in Chicago on February 5. Upon motion of Dr. Glock, taken by consent, it was agreed that the state medical association would pay Dr. Booher's expenses in attending this meeting if the AMA did not reimburse him.

There being no further business the committee adjourned. ◄



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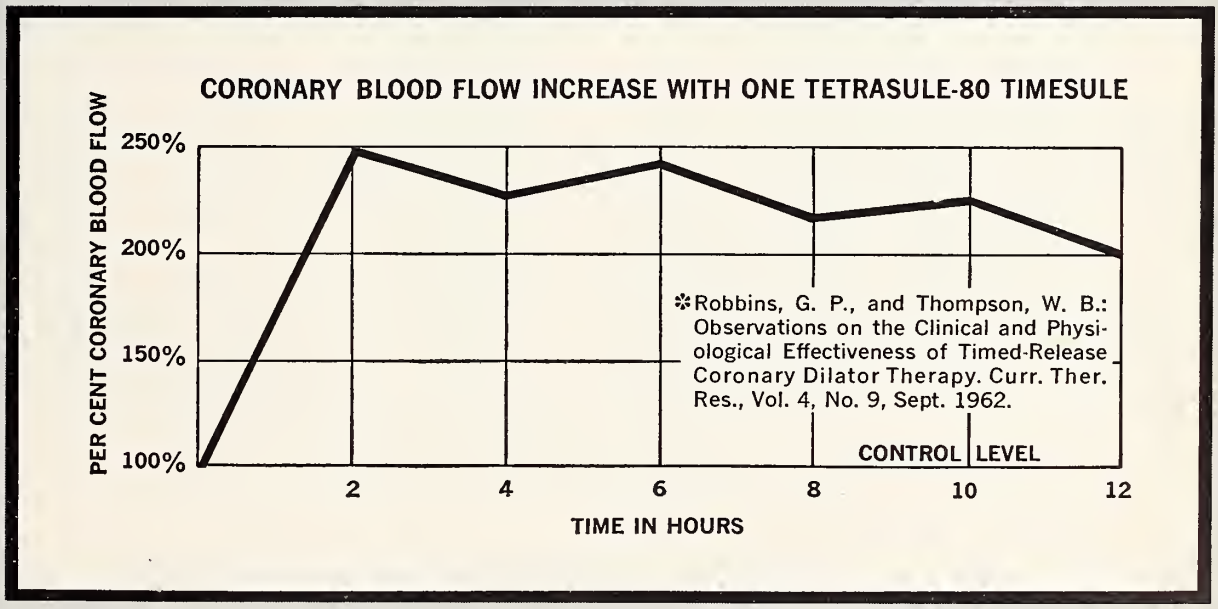


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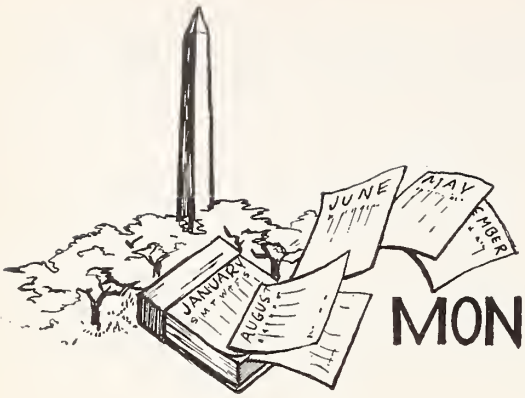
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This summary of what is happening in Washington is prepared by A.M.A.'s Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D. C.—The federal government appreciably increased its controls over the clinical testing of new drugs, including antibiotics, with new regulations effective Feb. 7.

The new regulations of the Food and Drug Administration require that the FDA be put on notice and given full details about the distribution of drugs for investigational use; that clinical investigations be based on adequate studies on animals; that the clinical tests be properly planned and executed by qualified investigators and that the investigators and the FDA be kept fully informed of the adverse findings of other investigators during the progress of the investigations.

If an investigation develops evidence that the drug is not safe or is ineffective, the FDA said it will order discontinuance of clinical tests.

The old regulations did not require either an initial notice to FDA of a clinical trial of a new drug or subsequent reports on such use.

Before they were announced in their final form, numerous modifications were made in the version published on Aug. 10, 1962, as proposed regulations. More than 300 written comments on the proposed regulations were received by the FDA. In addition, FDA officials met with representatives of the AMA and various other interested scientific groups.

But the FDA did not make all the changes urged by the scientific groups.

The Pharmaceutical Manufacturers Association credited the Department of Health, Education and Welfare and the FDA with modifying sufficiently the regulations as originally proposed so that "most of the major difficulties found by reputable medical scientists" had been resolved.

But the PMA said "the burden of paperwork imposed by the new regulations is enormous."

"The success of the department meeting its stated goals will of course depend in large part on the wisdom of administration of these regulations," the PMA said. "It is hoped that remaining troublesome problems may be resolved in the near future by appropriate amendments."

One modification was designed to permit some flexibility in the

Continued

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planning of the investigation of the safety and effectiveness of a new drug. Another modification cut down on the record-keeping requirements.

To meet criticisms that the regulations as originally proposed would impinge upon the physician-patient relationship by calling for inspection of the clinical records, the FDA said:

"The provisions for inspection of the patient's records have been modified to make it clear that the investigator may withhold the names of volunteers or patients unless the records of a particular volunteer or patient require a more detailed study of drug effects, or unless there is reason to believe that the records do not represent actual results obtained.

". . . if the record has been sent to the sponsor by the investigator, there is no confidentiality, and the record is to be made available by the sponsor for inspection by a properly authorized employee of the Department of Health, Education and Welfare. Where the record has not been sent to the sponsor, the investigator is required to maintain it and make it available upon request of a scientifically trained and specially authorized employee of the department."

The proposed regulations dealing with publication of findings of investigators were construed by some as restricting free flow of scientific information. But the FDA said the regulations were "not intended to bar factual news reporting to scientists or the public."

The proposed regulations also were said to deny extremely important new drugs, not yet approved for general distribution, to patients who might need them urgently as a life-saving measure. The FDA denied this, saying "there is no bar in the regulations to giving the necessary instructions to and obtaining the necessary commitments from a new investigator by telephone in case this is needed to save a life."

Pending further consideration, radioactive new drugs were exempted from the new regulations if they are shipped in accordance with current regulations of the Atomic Energy Commission.

FDA Commissioner George P. Larrick said that the regulations as issued provide strong and necessary controls over the investigational use of new drugs and meet all of the new provisions in the Kefauver-Harris Amendments of 1962, including assurance that a patient's consent to the use of investigational drugs be obtained by the investigators, unless in their professional judgment this is not feasible or is contrary to the patient's best interest.

However, the new regulations were issued under an old law. The drug testing provisions of the new law do not become effective until next May 1.

Before issuance of the new regulations, HEW Secretary Anthony J. Celebrezze approved a reorganization of the Division of New Drugs of the FDA's Bureau of Medicine. The HEW said the reorganization was designed

Continued on page 148

all things considered

in bronchitis—Considering the pattern of mixed bacteria, localized or diffuse involvement, potential underlying disease, and the need to allay symptoms and ease respiratory/cardiac function...physicians often include DECLOMYCIN demethylchlortetracycline in the course of therapy.

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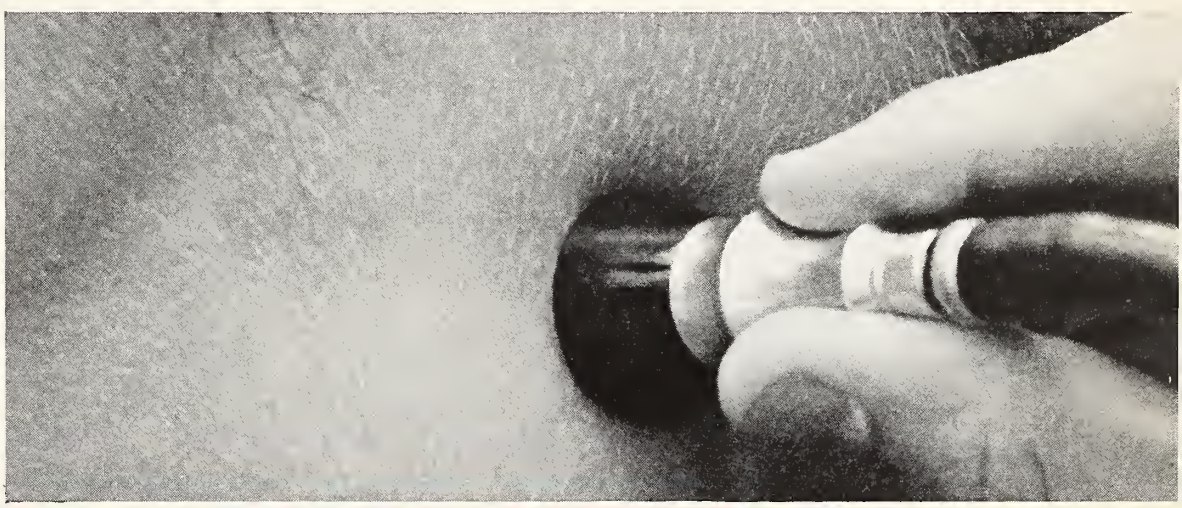
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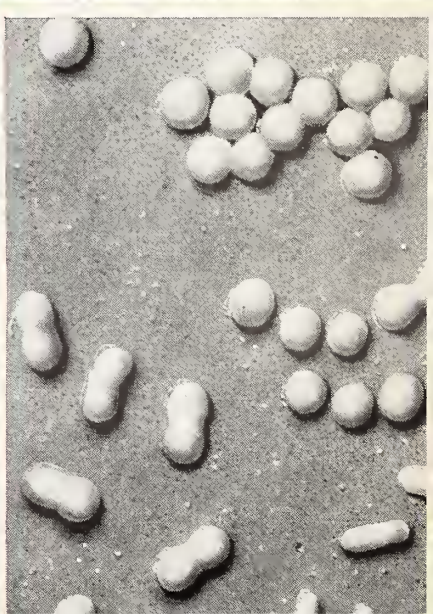
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to "permit FDA to discharge more effectively its increased responsibilities in the new drug area."

PHS LIFTS BAN ON SABIN VACCINE

The Public Health Service recommended use of type III Sabin oral polio vaccine after having banned it for three months while its safety was being reviewed. But the PHS still recommended that older adults take it only if their risk of catching the disease is higher than normal.

Surgeon General Luther L. Terry acted upon the recommendation of his special polio advisory committee. Dr. Terry urged that communities use all three types of the Sabin vaccine in polio immunization campaigns with particular emphasis on children and young adults.

The advisory committee said:

"Because the need for immunization diminishes with advancing age and because potential risks of vaccine are believed by some to exist in adults, especially above the age of 30, vaccination should be used for adults only with the full recognition of its very small risks."

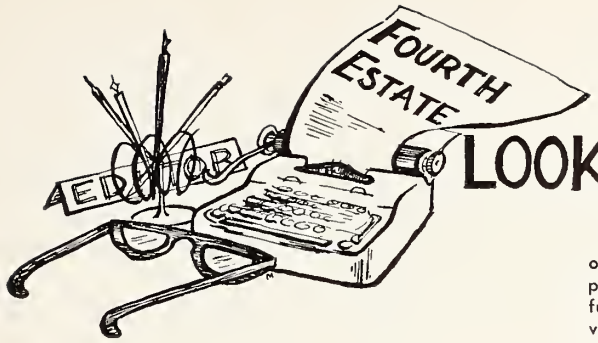
The PHS reported that polio continued to decline last year. There was a drop of 35% from 1961 in the number of cases. There were 866 cases, including 707 paralytic, reported through Nov. 30. ◄

From *The Journal* Fifty Years Ago

. . . The amount of surgical work going on in London [England] all the time is very great; the only difficulty apparently is to find it. This is the difficulty everywhere. While in Paris I had the good luck to meet at one of the nose and throat clinics the head of the staff in the otological department of St. Bartholomew's Hospital, Prof. Sidney Scott, who invited me to come and visit his clinic as soon as I came to London, and I did so. He introduced me to Dr. Rose of the throat department, and they were both very courteous to me and showed me a great deal of their work.

Dr. Scott in his mastoid operations combines skin grafting with the thorough exenteration of the mastoid area after the radical operation. This he does even in those cases where he leaves a portion of the drum and the ossicles, especially the stapes. He takes a very large skin flap from the thigh of the patient. This is floated on the top of some water in a bowl and thence conveyed to some thin gauze with the dissected side outward. After drying out the entire cavity, the gauze is pushed down to the bottom of the operated cavity and spread out in such a way that the entire surface is covered by the skin graft like a plaster dressing to be held in place by the packing. Many of these skin grafts attach completely by first intention. In a few days I have seen some of them looking fine after removal of the gauze. . . .

J. O. Stillson, M.D. "Notes About Some of the Clinics of Europe," *JISMA*, February, 1913.



LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentation of opinions which appear on the editorial pages of the public press, and which are of interest to the medical profession. Its function is to review comments which may be favorable or unfavorable to medicine. Members are invited to submit editorial clippings for this column.

Blackmail For Ransom?

We can draw only one conclusion from the announcement that more than a score of drug companies are going to "donate" about $50,000,000 worth of drugs to Fidel Castro as ransom money for the Cuban prisoners. The announcement is a phony.

From what we have been able to gather from behind the paper curtain that is drawn over the truth in Washington, the drug companies were politely blackmailed into supplying the drugs by the Kennedy administration. They were asked to do this "in the long range national interest." They say they were not told they had to do this. They didn't have to be. They know only too well what happens to businesses that refuse to do what the Kennedy administration asks. They have the lesson of the big steel companies who tried to refuse a Kennedy request. They know that Bobby Kennedy is in charge of the anti-trust division, and they know that New Frontiersman Kefauver is itching to destroy their patent protections. And then there is always the Internal Revenue Department to consider. And the Pure Food and Drug Administration. And they know, if they refused to do their "patriotic duty" and support the President's request, what they might expect in the way of public attacks upon their devotion to their country.

We wonder how the drug companies will report this transaction to their stockholders. "Ransom to Castro, $2,300,000"? Or "Blackmail to John F. Kennedy, $250,000"?

From what we can gather the drug companies themselves will be "donating" all the drugs. No money is going to change hands. They can deduct at least part of their "contribution" from their income taxes. This means, of course that the rest of us taxpayers will have to pay the balance. For, whatever taxes are avoided by the drug companies must be paid by the rest of us.

Why should the drug companies be forced to pay this ransom to salve President Kennedy's conscience? Why should U.S. taxpayers be forced to pay their share of this conscience money to a bloody tyrant who only two months ago was aiming atomic missiles at our homes? Why should we all be forced to help sustain a Communist regime that seeks to destroy the freedom of its own people and threaten ours?

It is all very well to sympathize with the Cuban prisoners and to wish to help them to freedom. We realize that President Kennedy feels a personal responsibility for their plight. But why can he not then be honest with the American people and ask their support in paying off this Communist jackal instead of resorting to subterfuge and virtual blackmail?

If this ransom is paid will it not be only the beginning? We have Khruschev's own words to indicate how Communist mentality works. In his letter to Bertrand Russell during the Cuban crisis he said this: "It is well known that if one tries to mollify a robber by giving him one's purse, then one's coat, etc., the robber will not stop robbing. On the contrary he will become increasingly insolent. Therefore it is necessary to curb the highwayman in order to prevent jungle law from becoming the law govern-

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ing relations between peoples and states." Our first ransom payment will be followed with new demands. Not only from Castro. Will the Kennedy administration next demand that the steel companies supply $100,000,000 worth of free steel to Communist China to ransom American soldiers still being held in their prisons since the Korean War? When ransom pays, criminals keep trying it.

This whole thing smells. It smells of blackmail and ransom and trickery and dishonesty and untruth. And this from the government of the United States. We never thought we would see the day when such a thing could happen.

Let us hope some last minute decision will call the whole thing off.—*Indianapolis Star*, Dec. 20, 1962.

That U.N. "Letter"

One of the main problems involved in following the United Nations war in Katanga is the complete unreliability of information released by the U.N.

There have been many episodes reflecting the self-serving nature of U.N. pronouncements—the most obvious being its original argument that its action in Katanga was defensive, followed by Ralph Bunche's acknowledgement that the aggression had been planned back in October.

Now another U.N. dispatch is agitating the curiosity of inquiring reporters. Last Wednesday, UPI said Moise Tshombe's "leading tribal chiefs [including Tshombe's own father-in-law] deserted him yesterday, branded him a traitor, and asked that the central government send in troops to crush his forces."

According to UPI, this statement was contained in a letter to Prime Minister Cyrille Adoula of the central Congo government, a copy of which was received by the U.N. Which means the source of the report is none other than the U.N.-central government axis itself.

At a meeting of the Indiana Conservative Club last week, Dr. Richard M. Nay of this city commented on the U.N.'s alleged "letter." Dr. Nay, who spent three months in Katanga, who knows the people there well, and who personally treated Tshombe's father-in-law, strongly questions the authenticity of the statements attributed to the tribal chiefs.

"To begin with," he said, "it would be almost impossible to get the eight chiefs together to sign such a letter. They are spread out all over the vast expanse of Katanga, and the country is in chaos.

"Secondly, many of these chiefs are as firmly set on autonomy as Tshombe himself. The Mwanta Yavu (Tshombe's father-in-law), whom I know very well, would never dream of signing such a statement.

"Just to check this, I called other Americans in recent contact with the Congo, and each of them believes the letter is a fake."

Dr. Nay's statement was supported by a report in Friday's Wall Street Journal, which said the U.N. and the U.S. State Department (naturally) accept the letter as authentic, but that there are "students of the Congo" who do not. For our money, any "student of the Congo" who tries to keep track of U.N. doubletalk about the Katanga massacre will discount anything stemming from United Nations sources.

Dr. Nay had another interesting comment to make. U.N.-inspired press reports continually describe Tshombe's home in Elisabethville as a "palace." "I have seen that house," says Dr. Nay, "and it is a modest two-story dwelling which is nothing like a palace. It is considerably smaller and less comfortable than our own Indiana governor's mansion.

"This is obviously an attempt to discredit Tshombe for living in regal splendor. The truth of the matter is that he presides over a truly democratic government and is the only leader in the Congo who has been popularly elected."

The verbal trick cited by Dr. Nay is only one of many popping up in the Congo dispatches. White officers serving with

Continued

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Poythress, White Section, Page 808 (1963 edition) and Product Identification Section

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FOURTH ESTATE

Continued

Tshombe, for example, are invariably described as "mercenaries," implying they have no real allegiance to Katanga's cause but are simply in it for the money. What, pray tell, are the Irishmen, Indians, and Swedes serving under the U.N., if not "mercenaries"? Are they in the Congo because they are aflame with loyalty to Cyrille Adoula? Or are they there because they are paid to be there?

The same thing goes for the word "gendarmerie," repeatedly used to identify Tshombe's army and to imply it is really not an army at all. The examples could be multiplied further. But we think enough has been said to put readers on guard against any report on Katanga which has the United Nations as its source. — *Indianapolis News*, Jan. 14, 1963. ◄

Babies Warm to Cold Feedings

Studies at Bellevue Hospital and the New York University School of Medicine indicate that babies thrive on cold formulas just as well as those which have been warmed by traditional procedures.

Under the direction of L. Emmett Holt Jr., M.D., and Edward A. Davies, M.D., with the assistance of Eileen G. Hasselmeyer, R.N., and Apollonia O. Adams, R.N., and observers from the nursing division of United States Public Health Service, one group of prematures was observed around the clock for eight weeks on a crossover study with warm and cold formulas. Sleep, crying, motility, feeding interest, amount of intake, weight gain, and regurgitation were noted.

Later, alternate babies in the pediatric service were given warm and cold feedings. Both studies indicated "negligible differences in their sleep patterns, vocalization and motility," and no significant differences in "the intake of food or fluid, the weight gain, or in the regurgitation of food." One difference, not regarded as significant, was that cold-fed babies had a 0.2°F. lower postprandial temperature compared with the warm-fed group.

Bottles were refrigerated at 39°F. until minutes before use; warm bottles were prepared by placing cold bottles in hot water. Heated formulas often varied in temperature from 93°F. to 124°F., suggesting that "the usual technic for regulating the temperature of the warmed feeding does not prevent undesirably warm feeding being given to the infant at times." Dr. Holt, whose findings are reported in the October issue of the *Journal of Pediatrics*, noted that between 150 and 200 hours per year could be saved for each of the 2.7 million bottle-fed babies if cold feedings were used. Reprinted from *Journal of the American Hospital Assn.*, Jan. 1, 1963.

The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 56 — February 1963 — Number 2

An Introduction to
The 1963 Heart Issue

Krannert Institute for Heart Research

KENNETH G. KOHLSTAEDT, M.D.
Indianapolis

THE HEART CLINIC at the Marion County General Hospital was established by Dr. Robert M. Moore soon after he returned from military service in World War I. For a time he encountered much opposition, but despite many rebuffs he persevered. Before too long the Saturday morning rounds became a very popular elective for students at the Indiana University School of Medicine.

Although no elaborate instruments or complicated laboratory procedures were available, the students recognized that these sessions with Dr. Moore offered them a great opportunity to examine patients with all kinds of heart disease. Many physicians practicing in Indiana today developed their skill in auscultation under the supervision of the heart clinic.

Patients also appreciated the interest and excellent care they received. Treatment and advice helped many to avoid congestive failure and hospitalization.

Dr. Moore found it necessary to retire because of ill health, and the program was interrupted during World War II. In 1946, Dr. C. J. Clark became head of the clinic.

In 1949, Mr. and Mrs. Herman C. Krannert sponsored the first Fellowship in Cardiology. One of the physicians who served in this capacity was Dr. Charles Fisch, who after entering practice continued to devote a large share of his time to the heart clinic. In 1956 the clinic was moved to its present location on the ground floor of the Flower Mission. This was far from ideal, but the added space made it possible to establish a number of laboratories.

The continued generous support from Mr. and Mrs. Krannert, the Indiana State Board of Health, and the National Heart Institute through the Department of Medicine, Indiana University School of Medicine, enabled the staff of the clinic to engage in research. Through the Lilly Laboratory for Clinical Research, facilities for studies involving experimental animals were made available.

Since 1958, Dr. Fisch has devoted his full time to cardiology at the Marion County

General Hospital and at the Indiana University School of Medicine. The staff has grown until there are four full time physicians, a physiologist, six technicians, two secretaries and a group of loyal, devoted volunteer workers. The residency in cardiology is accredited for training in this sub-specialty, and in addition research facilities are provided for trainees of the National Heart Institute.

Cardiac catheterization, electrocardiography, phonocardiography and vectorcardiography are provided for patients on all services at the General Hospital. Recently a laboratory for electrophysiology and exercise study has been established. Through the cooperation of Dr. John B. Hickam the entire program is integrated with the teaching and research in the Department of Medicine at Indiana University School of Medicine.

The widening of the scope of research at the laboratory, which is named in honor of its benefactor, Mr. Herman C. Krannert, has not decreased the interest of the staff in clinical cardiology.

Plans for expansion of the Robert Moore Heart Clinic and the Krannert Heart Research Institute are included in the building program of the Marion County General Hospital. ◄

About Our Cover

The human heart, that miraculous muscle upon which our very lives depend, is a muscle that allows no substitution.

The man with a leg muscle atrophied from illness or severe injury can learn to walk again, contiguous muscles can be taught to compensate for the useless one. The heart is not such an organ—no other muscle in the body can be taught to assume its burden of unceasing activity.

This 20th century, however, has seen gigantic breakthroughs in the knowledge of the way the heart functions. With this knowledge technics have been developed to aid the malfunctioning heart.

Defects inside the chambers of the heart that, untreated, would be crippling, can now be corrected by the surgeon who can operate on a heart that has been rendered virtually motionless and blood-free, thanks to the invention of the heart-lung machine. This complex machine acting as an artificial heart, takes over the oxygenation and circulation of blood for the patient.

Who would have dreamt, in 1863, that prosthetics could be used to replace damaged aortas, but today this is no dream, it is fact. Still newer is the artificial "pacemaker," an electronic device the size of a small transistor radio, carried by the patient under his clothing. Its leads are actually embedded in the heart muscle, leads which deliver a small electric charge sufficient to stimulate a continuous rhythm of contraction and expansion.

Developments such as these mean that lives that would have terminated abruptly when cardiac disaster struck are now being saved. Hundreds of people annually who, through cardiovascular accidents, would have been relegated to lives of enforced invalidism can now be restored to active, productive and full lives.

The pictures on this month's cover were taken at the Krannert Institute and show some of the activities there. *Top left:* Catheterization laboratory showing the nine inch image intensifier with attachment for cineangiography. *Top right:* Electrophysiology laboratory. *Center left:* Electrocardiographic, vectorcardiographic and phonocardiographic processing laboratory. *Center right:* A secretary at work in the office. *Lower left:* Recording a phonocardiogram in the clinical laboratory. *Lower right:* Measuring oxygen debt in the exercise laboratory.—M.E.R.

A brief review of some of the factors responsible for and possibly affecting the rhythmicity and conduction of the heart.

Electrophysiological Aspects of Cardiac Rhythmicity and Conduction

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Indianapolis

AN UNDERSTANDING of the electrophysiological basis of rhythm and conduction can aid the clinical electrocardiographer in the evaluation and treatment of the various cardiac arrhythmias.

Probably the single greatest advance in cardiac physiology occurred when Draper and Weidmann[1] and others[2, 3] adapted the glass microelectrode technic for the study of cardiac cells. This electrode is, essentially, a thin glass tube drawn out at its tip to less than 1 micron (0.001 mm.) in diameter. The diameter size is extremely critical since larger tip electrodes will most certainly damage the cell which is being impaled.[4] When proper size electrodes are drawn out, they are filled with a concentrated electrolyte, as 3 Molar KC1. The glass tube itself then acts as an insulator while the concentrated electrolyte serves as the conductor.

When this electrode is inserted into an excitable cell, it is paired with a suitable extracellular electrode and connected to special apparatus, as a cathode follower, a direct-coupled amplifier and an appropriate recording unit. As such, one can easily record the potential difference that exists across a viable membrane at rest and during cellular activity. Thus, the typical transmembrane potential of an inactive myocardial fiber varies around 80-90 millivolts with the inside negative with respect to the cell's exterior. When excited, however, this potential difference is quickly lost, and in fact becomes opposite in sign (to about +20 m.v.) indicating that a reversal of polarity has occurred.

Contour Segments Numbered

For the sake of comparison, electrophysiologists have fragmented the contour of the cardiac action potential and each segment has been identified with a number.[3] Thus, the sudden initial upstroke of the depolarization is referred to as phase 0, and includes the overshoot. The restorative processes start immediately (repolarization). There is a fast but slight repolarization initially (phase 1) but it then slows down to result in a plateau (phase 2). The duration of the plateau depends upon the fiber type; being much less prominent in atrial cells and greatly prolonged for Purkinje fibers. Following the plateau there is once again a fairly rapid wave of repolarization (phase 3) until the transmembrane potential is once again attained (phase 4). A schematic representation of such an action potential, labeled as described above, is depicted in Figure 1.

Action potentials of this configuration are usually obtained from myocardial cells of the ventricle and from the Purkinje network located in and ramifying this chamber. There is, however, one difference in

* From the Krannert Heart Research Institute, Marion County General Hospital, the Department of Medicine, and the Heart Research Center, Indiana University School of Medicine, Indianapolis.

Supported by the Herman C. Krannert Fund, the Indiana Heart Association, Indiana State Board of Health and the National Heart Institute (H.T.S. 5363, H-6308).

that Purkinje fiber action potentials show a more prolonged plateau. The significance of this is evident in that it leaves the Purkinje network refractory at the time when the ventricular cells are being excited, thereby preventing retrograde excitation during the normal cardiac cycle.

On the other hand, transmembrane action potentials obtained from atrial cells show a much less developed plateau (phase 2). In fact, phases 1 and 2 are slight, and their time course of repolarization is much slower than phase 3 (Figure 2). However, phase 0 for all of the tissues just described is the same, in that all show a rapid upstroke. Quite the contrary is seen in the configuration of the action potentials obtained for the specialized conducting fibers located in the sinoauricular and atrioventricular nodes. As depicted in Figure 3, phase 4 is not steady but instead shows a slow continuous diastolic depolarization. The magnitude of the transmembrane "resting" potential varies between –50 to –60 m.v. Furthermore, phase 0 is not rapid, and the overshoot is much reduced and in many instances may not even be present. This interesting but complicated action potential will be further discussed below.

Selective Permeability

By and large, the ionic theory, as postulated by Hodgkin[5] for the giant axon of the squid, can be applied for cardiac muscle to explain the mechanisms responsible for the potential differences existing across the membrane. A number of investigators[6-8]

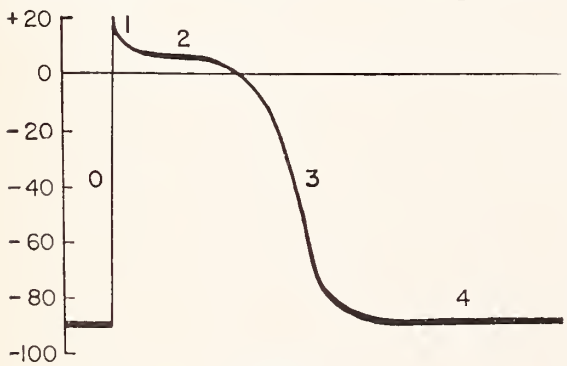


FIGURE 1

SCHEMATIC REPRESENTATION of an action potential from a ventricular cell. The numbered periods correspond to: (0) rapid phase of depolarization; (1) initial fast repolarization; (2) the plateau; (3) terminal rapid repolarization; (4) transmembrane resting potential.

(From Hoffman and Cranefield: *Electrophysiology of the Heart.* McGraw-Hill Book Co., Inc., New York, 1960.)

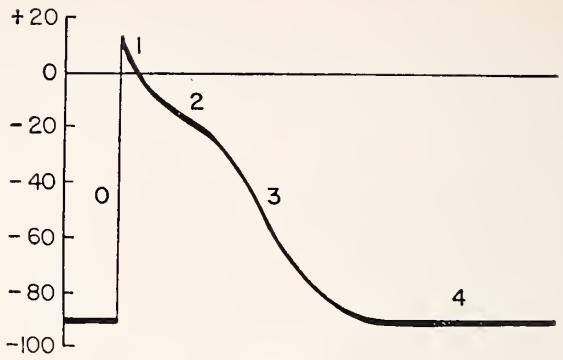


FIGURE 2

SCHEMATIC RECORD of an atrial cell action potential. Units are in millivolts of potential difference across the membrane. (From Hoffman and Cranefield: *Electrophysiology of the Heart.* McGraw-Hill Book Co., Inc., New York, 1960.)

have shown that the intracellular potassium concentration is 30-40 times as much as is present extracellularly. The reverse situation exists for the sodium ion. It has also been observed that the membrane at rest is much more permeable to potassium than to sodium. Existence of this selective permeability, plus the uneven distribution of these ions across the membrane permits the cell to act as a battery.

The uneven ionic distribution is most probably attained through an electroneutral metabolic-dependent "pump" which actively shifts sodium out of the cell interior while transferring the potassium ion inside. The potential which can thus be attained is given by the Nernst equation which states that a potential can be created across a membrane when this barrier partitions a solution containing an ion of unequal concentration. The membrane of course must be permeable to this ion.

For the plasma membrane this ion is potassium and the potential difference can be calculated by the expression:

$$E_K = \frac{R\ T}{F} \log \frac{[K_i]^+}{[K_o]^+}$$

where R, T, and F are the gas constant, absolute temperature, and the Faraday, and K_i and K_o are the concentration of potassium inside and outside the membrane. Thus calculated, it turns out that at 37° C. the E_K is approximately 90 millivolts, which agrees fairly well with the experimentally measured values. Further evidence that the transmembrane resting potential is essentially a potassium potential is in the obser-

vation that this membrane potential can be reduced when the extracellular potassium concentration is increased, but will not be affected when the sodium or chloride concentrations are altered.

It should be emphasized that what is extremely important is the permeability characteristics of the membrane to these cations (or more correctly the membrane conductivity). Thus, when the cell becomes excited, the membrane permeability changes in favor for the sodium ion. The two driving forces (potential difference and concentration gradient) are now permitted to come into play and sodium enters the cell resulting in depolarization and overshoot. That sodium influx is responsible for depolarization lies in the fact that with activity the resistance of the cardiac membrane decreases and that a diminution in the height of the action potential results when the extracellular sodium concentration is reduced.[9]

Excitability is totally eliminated when the extracellular sodium concentration is reduced to 11-20% of normal.[10] Furthermore, the rising velocity and amplitude of the action potential is little affected by concentration changes of all other extracellular ions.

Two factors appear to be responsible for and determine the values of the transmembrane resting and action potential. These are the concentration gradients of potassium and sodium, and the relative membrane permeability to these two cations. The equation describing the contribution of these factors, as developed by Goldman[11] is expressed as follows:

$$E = \frac{R\ T}{F} \log \frac{P_K\ [K_i] + P_{Na}\ [N_{ai}]^+ \ldots .}{P_K\ [K_o] + P_{Na}\ [N_{ao}]^+ \ldots .}$$

where once again E, R, T, and F have the usual connotations, and P is the permeability. To fully comprehend the above relationship, the aspect of permeability must be constantly to the forefront. Thus, when a cell is not excited but at rest, its membrane is relatively more permeable to potassium (for example, if we let $P_K = 1$, then by comparison $P_{Na} = 0.04$), and so the transmembrane potential is dominated by the potassium gradient.

With activity, as the membrane is depolarized, the permeability to sodium increases which permits some sodium to enter the cell and causes further depolarization. This in turn permits the membrane permeability to sodium to further increase thus facilitating a greater influx of sodium. Finally, sodium permeability becomes greater than the potassium permeability and the membrane potential is hereby determined by the sodium gradient. At the peak of the action potential, the membrane starts its restorative process which involves again a reversal of its permeability to sodium and potassium. The first step is a decrease in sodium permeability which is known as *inactivation* (P_{Na} begins to fall towards its resting value), and soon after P_K begins to rise. Both of these changes allow the potassium gradient to dominate, and thus determine the transmembrane potential resulting in repolarization.

S-A Node Acts as Primary Pacemaker

The truly pioneering work by Lewis and co-workers,[12] and Eyster and Meek[13] clearly pinpointed that the origin of cardiac rhythmicity was localized in the sino-atrial node. This region of the heart shows the earliest electrical changes and is soon followed by activity propagated through the rest of the myocardium. It is therefore this region which is normally responsible for driving the heart, and hence its designation as the pacemaker. The introduction of the glass microelectrode[4] and its subsequent utilization in the recording of transmembrane potentials of cardiac cells elucidated the mechanism by which such pacemaker cells were or could be made to be responsible for the intrinsic rhythmicity of the heart.[1,14,15] Such a cell shows a progressive decline in its resting potential (phase 4 in Figure 3) following the repolarization wave so that on reaching its threshold potential the cell becomes excited in a self-sustaining manner resulting in full depolarization. In fact, all cells potentially capable of developing intrinsic rhythmicity exhibit this characteristic sign of slow diastolic depolarization.[3] In addition, all pacemaker cells show but a slight overshoot, if any, and a slow repolarization.

The time course and configuration of

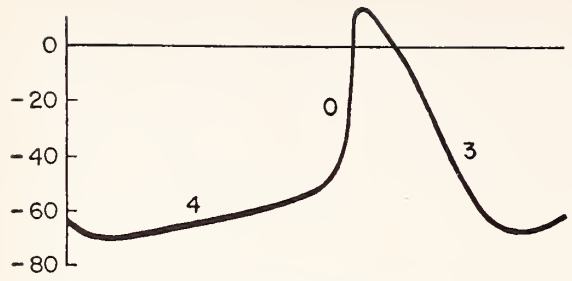


FIGURE 3

SCHEMATIC RECORD of a sina-atrial actian patential. Nate that phase 4 is nat steady but shaws a slaw cantinuous diastolic depalarizatian.
(From Hoffman and Cranefield: *Electraphysiology of the Heart.* McGraw-Hill Baak Ca., Inc., New Yark, 1960.)

these action potentials have great physiological significance, in that cardiac rate and rhythmicity are clearly dependent upon the magnitude of the resting potential, the level of the threshold potential and the slope or steepness of the diastolic depolarization. The mechanism responsible for this slow diastolic depolarization, however, has not been clearly defined, although there is some evidence that there is a concomitant progressive increase in membrane resistance.[1,16] This ancillary observation may be indicative of a decreased membrane permeability to potassium. In the face of this reduced outward movement of potassium, the normal influx of sodium will tend to decrease the transmembrane resting potential slowly and continuously until it reaches threshold.

There are other possible causes which can be invoked to explain the slow diastolic depolarization and hence intrinsic cardiac rhythmicity. (For a more complete description, the reader is referred to the many excellent works as summarized by Hoffman and Cranefield.)[17] Changes in cardiac rhythm can also occur when ectopic pacemakers are activated along with the primary pacemaker. Extra impulses are thus initiated which will interfere with normal pacemaker activity and result in arrhythmia. These arrhythmias may exist in the form of premature systoles, tachycardia, flutter or fibrillation. No matter what the cause of the intrinsic rhythmicity or changes therein, it should be kept in mind that cardiac drugs can and do alter rhythmicity by affecting the slope of depolarization and/or the potential levels.

Following depolarization of the primary pacemaker in the sino-auricular node, the current so generated flows longitudinally and lowers the transmembrane potential of apposing areas. When threshold level is attained, these areas in turn will be depolarized and self-sustaining propagated action potentials spread over the entire myocardium. There is, however, a preferential sequence of activation. That activity is first initiated in the vicinity of the S-A node has been referred to above. The velocity of conduction through this area is difficult to measure since it increases with distance from the primary pacemaker cell.

Nodal Delays Significant

In the rabbit heart, the earliest activity was detected in the wall of the superior vena cava, a few mm. away from the crista terminalis, and the activity propagated radially at an extremely low velocity of 0.05 meters/second.[18] As propagation approached the crista terminalis, conduction velocity became increasingly faster. In fact, activity from the crista terminalis spread into the atrial roof and down to the coronary sinus at velocities ranging from 0.5 to 1.0 m/sec. From the atria, activity then spreads through the A-V node where, after some delay, the sequence of activation was through the His bundle branches, peripheral Purkinje fibers, and then ventricular tissue proper.

Of great significance is the delay in the spread of excitation which occurs in the A-V region. Use of the microelectrode technic has aided immensely in the elucidation of the mechanism of nodal delay. Extensive studies on the rabbit heart[18-21] have yielded the following information. From a functional point of view, the A-V nodal region can be divided into an AN, N and NH zone. Activity approaches the atrial AN boundary region at right angles and propagation becomes slower. Associated with the reduced conduction velocity is a decrease in the rise time of the action potential.

When the excitatory wave reaches the narrow middle N zone, propagation is as slow as that seen in the S-A pacemaker area (0.05 m/sec). The upstroke of the action potential is slow and the propagation time

consumes about 30 milliseconds of the total A-V delay. After the N zone is passed, and activity enters the NH zone, conduction velocity increases (1.0-1.5 m/sec) and the action potentials are identical to that seen in the His bundle area. It has been postulated[20,22] that the mechanism of propagation within the A-V node is one of decremental conduction. Decremental conduction means that, whatever the cause, a gradual decrease occurs in the rising velocity and a gradual diminution in the amplitude of the action potential as the activity propagates over a given path. Associated with this is a decrease in conduction velocity. According to Paes De Carvalho,[21] the N layer is the seat for potential A-V block to occur since it is in this zone where conduction velocity is at its minimum. If decremental conduction in the N zone is enhanced then the action potential amplitude attained may not be sufficient to excite the next zone and the propagation wave will not pass to the bundle of His. The result is A-V block.

Thus the potential "dam" for excitation lies in the fact that conduction through the N layer is decremental, but once excitation passes this zone with a high enough amplitude, the wave will reach the bundle of His. As the activity enters the His area and the bundle branches, there is again an increase in conduction velocity attributable to the greater diameter of these fibers and their infrequent branching. Action potentials from these cells are characterized by a rapid upstroke, high amplitude and long duration. Conduction then slows down as activity enters the ventricular muscle presumably due to the smaller fiber diameter and frequent branching. The sequence of activation and the typical action potentials obtained from the various parts of the heart as the propagation wave passes these sites is illustrated in Figure 4. The relationship of the different parts, fiber diameter and frequency of branching is schematically represented in Figure 5.

Knowledge of Cause Essential to Treatment

Of interest to the clinical electrocardiographer is the basis for disturbance in rhythm and conduction, and the treatment thereof. As has been aptly pointed out by Moe,[23] any agent to be of potential therapeutic value for cardiac arrhythmias must affect either the excitability, automaticity or refractoriness of the heart. That these are interdependent is self-evident, in that rhythmicity is a function of cardiac excitability, and changes therein will affect refractoriness. Likewise, conduction may be markedly affected by changes in excitability.

Generally, impulse transmission in cardiac tissue occurs at different velocities in the various parts of the heart. In any given fiber, however, changes in conduction velocity can be attributed to changes either in the resting potential, threshold potential, rate of depolarization, action potential duration, the degree of repolarization prior to the arrival of the next impulse, or changes in the core conductor properties of that tissue.

It is essential to be familiar with the basic electrophysiological properties of the cardiac cell for proper analysis of the various experimental and clinical arrhythmias

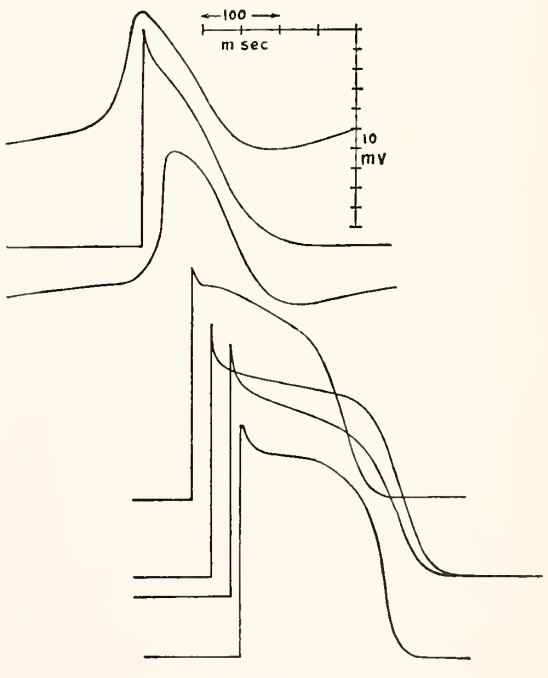


FIGURE 4

GRAPHIC REPRESENTATION of the sequence of activation, time relationship, and the contour, amplitude, and duration of the action potentials obtained from the various sites (above down): sino-atrial node, atrium, atrioventricular node, bundle of His, Purkinje fiber in a false tendon, terminal Purkinje fiber and ventricular muscle.
(From Hoffman and Cranefield: *Electrophysiology of the Heart*. McGraw-Hill Book Co., Inc., New York, 1960.)

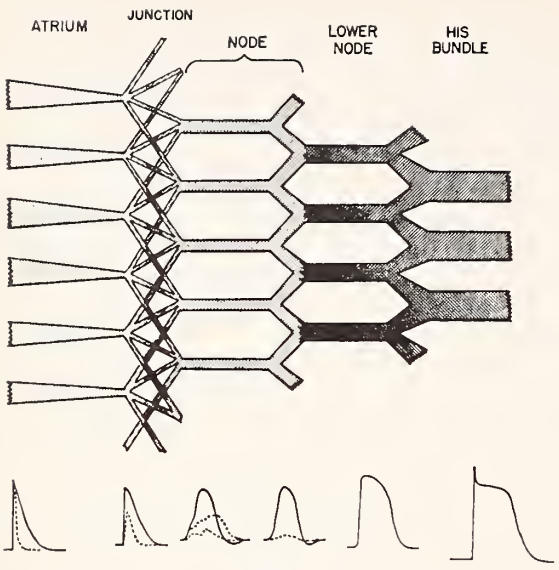


FIGURE 5

RELATIONSHIP of fiber diameter located in the atria, atrioventricular node, and bundle of His (top). Bottom illustration shows action potentials recorded from these sites under normal conditions (solid lines) and the effect of acetyl choline on the shape, amplitude and duration (dotted lines). (From Hoffman and Cranefield: *Electrophysiology of the Heart.* McGraw-Hill Book Co., Inc., New York, 1960.)

and in turn the changes induced by drugs. Specifically, aberrancy in rhythm and conduction must involve the specialized conducting tissues of the heart comprising the sino-auricular and atrioventricular nodes, the His area, bundle branches, and the Purkinje network.

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Ion Transport and the Myocardium

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R. H. BING HAS STATED that "the evidence points toward the organs of energy utilization, the contractile proteins, as the site of the myocardial derangement in heart failure resulting from hypertensive, arteriosclerotic and valvular heart disease."[1] This statement follows a short review of experimental evidence which indicates that oxidative metabolism in the failing heart in the above three conditions is not significantly different from that in the normal heart. Accordingly, Bing classifies heart failure, as did Olson and Schwartz,[2] into two categories: metabolic and nonmetabolic. The metabolic classification includes heart failure resulting from anemia and anoxia, hyperthyroidism and thiamine deficiency. Cardiac failure results in these three cases as a result of decreased energy production and/or storage and release.

In the pursuit of the etiology of congestive heart failure in valvular disease, an understanding of the contractile proteins of the myocardium and the factors influencing contractility are sought. A basic premise is that there probably is a marked difference between myosin extracted from normal hearts and that from failing hearts. According to Olson,[3] normal cardiac myosin disaggregates in dilute solution, whereas myosin extracted from the failing heart shows a reciprocal behavior and undergoes aggregation in dilute solution. In doing so, it reaches a very high intrinsic viscosity. The work of Olson and others, plus the demonstration by Kako and Bing,[4] of a decreased contractility in actomyosin bands prepared from failing human heart muscle (postmortem) support the concept of "end organ" failure, although absolute evidence is by no means available and much disagreement exists.

"Heart Failure" Tag Misleading

The hypothesis to be presented here is that the change in the physicochemical properties of the contractile proteins in valvular disease is due to a state of ionic disequilibrium initiated through interference with active ion transport mechanisms across the plasma membrane; and, that interference with active ion transport is necessarily through a defect in metabolism, either oxidative or intermediate. It is suggested that the classification of heart failure as presently used is an oversimplification and somewhat misleading.

In support of the hypothesis of ionic disequilibrium one need only survey the literature to be impressed that ionic concentration, the distribution of sodium and potassium in muscle, and the influence of the alkali metal ions, particularly calcium, assume an acutely prominent role in the contractility of heart muscle. The physical state of extracted muscle protein has also been shown to be sensitive to minute ionic strength changes. Szent-Gyorgyi[5] showed that extracted actomyosin exists as a gel at low ionic strength whereas in higher salt concentrations it dissociates. Complete dissociation of the actomyosin complex is effected by a not more than 15% increase in the KC1 concentration.

It is not particularly pertinent to recite the almost endless experimental evidence associating changed contractile state with

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Supported in part by the Krannert Fund, the Indiana Heart Association and the U. S. Public Health Service (H-6308, H.T.S. 5363).

changing ionic environment. It is interesting, however, in support of the ionic disequilibrium theory, to speculate about the ionic environment of the failing heart as related to the cardiac glycosides. It is paradoxical to theorize that interference with active transport is the mechanism by which ionic equilibrium is disturbed and, at the same time, to state that the cardiac glycosides are known to inhibit transport systems (a problem which will be discussed in greater detail below). However, the correction of one defect by another is not a strange paradox in biologic systems.

It is not necessary to assume that a corrective effect be exercised at the same locus as the original defect. The important aspect is that both defects relate to the ionic environment. Olson[6] has come to interesting conclusions while attempting to frame a hypothesis for the action of digitalis at the molecular level. By considering the extremely low concentration of digitalis effective in man (a molar ratio of digitalis to total heart protein in the order of 10:4) he postulates that for digitalis to modify the contractility of a protein, the protein must be in a relatively low concentration. A hypothesis would suffice which provides for the fixation of digitalis with a myofibrillar protein of low concentration which, in turn, could modify the behavior of its constituent contractile protein.

If, on the other hand, the protein affected by digitalis were an enzyme having to do with the transport of a given ion which, in turn, influences the contractility of the contractile protein, the requirements of the hypothesis would also be met. In support of the latter suggestion, there is a consistent body of evidence that glycosides have a profound effect on transport mechanisms. The evidence that glycosides have effects on various physical properties of muscle cell protein is, on the other hand, quite conflicting and there is still no certainty that glycosides enter the cell in order to be available to affect the muscle directly.

Transport Mechanisms

If a pathologic ionic environment as the etiology for pathologic myocardial contractility is accepted, interference with active ion membrane transport mechanisms across the plasma membrane must also be accepted. The rationale for this is the concept of active transport developed to explain assimilation of electrolytes from an external environment where concentration of the substance may be low and the maintenance of an intracellular ionic environment against an electrochemical gradient. These activities cannot be explained by physical laws and a metabolically-driven active transport system for organic as well as inorganic substances is generally well accepted.[7]

An attempt to locate the site of metabolic failure resulting in interference with transport mechanisms as relates to cardiac muscle will be approached by correlating experimental evidence relating to oxidative metabolism in the membrane transport field and information regarding the oxidative metabolism of cardiac muscle. It will be necessary to borrow evidence from work done on non-cardiac tissues and in various species. Misinterpretation is possible by following such an approach; but, this should not be a deterrent to the development of a general thesis.

Some of the earliest work in the membrane transport field was done in the attempt to demonstrate the route by which energy from metabolism is supplied to active transport mechanisms. Conway introduced a method of examining the effect of metabolic inhibitors on the active transport of ions in frog muscle.[8] In the presence of various inhibitors including dinitrophenol (DNP), cyanide, anoxia, low temperature and ouabain, the ability of a sodium-loaded muscle to bring about a net extrusion of sodium into the recovery medium containing 10 mM K+ was tested. The inhibitory effect of cyanide was most crucial because it suggested to Conway that ion transport was obligatorily coupled to electron transport along the cytochrome chain.

A defect in the electron transport chain would result in increased anaerobiosis and a shift in the oxidative-reduction system toward a more reduced state:

$$\text{Pyruvate} + \text{DPNH} \xrightarrow{\text{LDH}} \text{Lactate} + \text{DPN}+$$

An increase in diphosphopyridinenucleotide + (DPNH) would shift the equilibrium to the right with the production of lactic acid and the oxidation of DPN. If because of excess of lactate or because of diminished production or rapid removal of pyruvate the reaction is pushed toward the left, lactate utilization would be reduced.[9] In the failing heart, however, there is general agreement that extraction and utilization of various substrates, as well as oxygen consumption, are normal.[10] It is not felt, therefore, that interference with electron transport initiates failure of membrane transport in the failing heart.

Phosphate Bond Energy

Keynes and Frazier[11] were unable to find any effect of cyanide on sodium extrusion in frog muscle and concluded that sodium "pumping" could take place under anaerobic conditions and postulated that the sodium pump was driven from phosphate bond energy. Caldwell[12] demonstrated a parallel between the amount of adenosinetriphosphate (ATP) and related substances in the squid axon and the rate of emergence of labelled sodium from the axons. He also showed that the time course of the disappearance of ATP after poisoning with cyanide and its reappearance after washing the inhibitor away was very similar to that of the decline and subsequent recovery of the sodium efflux.

Although Caldwell's work suggested that ion transport mechanisms may be driven by phosphate bond energy, it was necessary to prove conclusively that a causal relationship exists between ATP and the rate at which ions are transferred up an electrochemical gradient. Caldwell, Keynes, Hodgkin and Shaw[13] have worked on the experimental hypothesis that the causal relationship could be demonstrated by blocking the normal metabolic sources of ATP synthesis, waiting for the endogenous supply of ATP to be exhausted, and then examining the effect on active transport of introducing ATP into the cell. In general, the observations were consistent with a causal relationship when other factors were taken into consideration (exchange fluxes, existing ATP/ADP ratios, etc.).

Apparently, transport systems in the failing myocardium are not interrupted by a deficiency of formation of ATP. The fact that ventricular ATP and creatinephosphate (CP) levels do not change in failure due to valvular disease suggests that the availability of high energy bonds is not the limiting factor. Also, the P:O ratio in failing heart muscle *in vitro* is not significantly different from normal. This indicates that oxidative phosphorylation is unimpaired.[15]

Perhaps it is in the release mechanism for stored energy, ATP hydrolysis, that a common denominator is to be found for an interruption of membrane transport and ionic disequilibrium in the failing myocardium. Much investigative work by membrane physiologists is demonstrating that adenosinetriphosphatases (ATPases) are an integral part of the sodium pump. The effect of different ions in activating the ATPases and the effect of the cardiac glycosides in inhibiting them is now being studied intensively.

Dunham and Glynn[16] suggest that the cardiac glycosides have a marked inhibitory effect on the magnesium activated ATPases present in hemoglobin-free ghosts of human erythrocytes and that the inhibition of active potassium uptake by a low concentration of ouabain can be reversed by raising the external concentration of K+. Post and Albright[17] working with broken human erythrocyte membranes have suggested that ATPase activity and active sodium-potassium transport have an unusual group of properties in common thereby suggesting a strong relationship between the two. Ouabain inhibits both systems and does so stoichiometrically.

Evidence that this phase of oxidative metabolism of the failing myocardium is undisturbed is less complete than is the evidence for normal oxygen utilization and storage. One line of argument is that if heart failure were caused by a subnormal rate of ATP hydrolysis, the cardiac glycosides, in effecting improvement in contractility, should also be associated with a parallel increase in ATP splitting.[18] This is not necessarily true and, in association with the above evidence of the effect of the glyco-

sides in inhibiting ATPase, would be even more suspect.

It might be said generally that the evidence for normal amounts of ATP and CP and their ratio in the failing myocardium could indicate uninterrupted ATP hydrolysis. One would expect either increased ADP, ATP, or CP levels or a disturbed ADP/ATP/CP ratio if hydrolysis were not occurring properly. In cardiac muscle, however, there is a relatively small reserve of high energy phosphate bonds as compared to skeletal muscle (6:1). The heart must rely on a more immediate type of oxidative metabolism to supply a steady supply of energy.[19]

There is evidence, for example, that ATP levels are not depressed by DNP which suppresses the generation of high energy phosphate at the electron transfer level. ATP levels are maintained for short periods of time by a very marginal CP reserve.[20] Since most of the energy liberated in heart muscle is channeled into mechanical work via the contractile process, it is not difficult to suppose that small ADP/ATP/CP ratio differences in a relatively "hand-to-mouth" system could easily go undetected as measured in heart-lung preparations.

Summary

It appears that the lesion of congestive heart failure of the low output type is located in the contractile mechanism itself, presumably because of an alteration in myosin and hence, actomyosin. Since the stimulus for this change is unknown, it is theorized that chronic ionic disequilibrium may result in permanent physicochemical changes in contractile proteins. This theory has been proposed in answer to some difficulties inherent in a widely stated theory that chronic stretch initiates the changes in the contractile mechanism. A chronic stretch theory is difficult to correlate with left ventricular inadequacy in some cases of mitral stenosis following valvulotomy. Similarly, chronic stretch as an initiating factor may or may not be present in chronic arteriosclerotic and hypertensive heart disease.

It is also proposed that the ionic disequilibrium is initiated by interference with active ionic transfer mechanism across the plasma membrane, a metabolically dependent activity. Schematically, this system can be represented as in Figure 1.[21] This transport system assumes a carrier (C) which is modified on one side of the membrane by a reaction involving metabolic energy to form a high affinity (C–) for an ion to be transported (Na+). It picks up the substance to be transported and crosses the membrane as a complex (NaC). The carrier is then modified in a second reaction to reduce its affinity for the transported ion and it is released. The carrier may return "empty-handed" or in combination with another ion (K+).

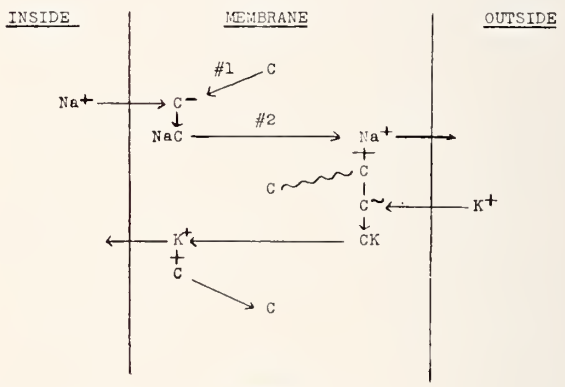


FIGURE 1

SCHEMATIC representation of ion transport. For detailed description see text.

It can be seen that an interruption of normal bioenergetics at the area of carrier modification (Site No. 1 and Site No. 2) could result in abnormal ionic equilibrium within the cell. An oxidative metabolic error could occur as a result of interference with electron transfer along the cytochrome chain, in phosphorylation, or, in energy release via deficient hydrolysis and ATPase activity. An intermediate metabolic error either through the absence or modification of the carrier could also result in an abnormal ionic environment. A defect either in phosphorylation hydrolysis or in intermediate metabolism is favored here.

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A Great Detriment To Public Health

Today tuberculosis, pneumonia and other scourges of the recent past are no longer among the top ten killers, due largely to breakthrough in drug therapy. But we are still confronted with the scourge of diseases such as heart disease, cancer, mental illness, neurological disorders and many others. I am sure no one of us would wish to retard much-needed research leading to new drugs or in any way delay the availability of existing drugs for cancer and other uncured ailments.

Keeping a useful drug off the market or unduly delaying its marketing may frequently in itself be a great detriment to public health. Today we regard the drugs of 1942 as outmoded. It is to be hoped that the doctors of 1982 will consider the drugs of 1962 just as outmoded. That can be accomplished only by continuation of the present dynamic drug research program.—Chester S. Keefer, M.D., Director, Boston University-Massachusetts Memorial Hospitals Medical Center, to House Interstate and Foreign Commerce Committee, August 20, 1962.

A Case Report and Discussion

Bilateral Bundle Branch Block

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BILATERAL BUNDLE BRANCH block is a rarely reported disorder of conduction.[1] However, anatomic investigation has revealed many lesions involving both bundle branches.[2] The frequent occurrence of right and left bundle branch block in clinical material also makes the chance occurrence of both in the same patient a likely sequence of events.

This disorder is reported only rarely because it mimics other defects and is very difficult to prove beyond any doubt. Theoretically, bilateral bundle branch blocks of various degrees would have the manifestations described below:

Theoretical Manifestations

I. *Prolonged PR interval with a normal QRS interval.* This pattern may be seen with bilateral equal first degree bundle branch blocks.

II. *Prolonged PR interval with bundle branch block.* This pattern may be caused by bilateral unequal first degree bundle branch blocks and also by a first degree bundle branch block associated with a third degree bundle branch block.

III. *Normal PR with one bundle branch block alternating with a longer PR interval and the opposite bundle branch block.* This pattern of abnormal conduction is caused by a first degree block of one bundle branch and a second degree block of the other bundle branch.

IV. *Alternating bundle branch block with one bundle branch block associated with a constant long PR interval and the other bundle branch block associated with a variable shorter PR interval. Also an occasional cycle would have a long PR interval and a normal QRS complex.* This pattern is diagnostic of a first degree block of one bundle branch and a second degree block of the Wenckebach type of the other bundle branch.

V. *Second degree heart block with a normal PR.* This may be seen with bilateral second degree block of the bundle branches when the blocks are synchronous and equal.

VI. *Alternating left and right bundle branch block with a normal PR.* This pattern is seen with bilateral asynchronous 2-1 block of the bundle branches.

VII. *Alternating left and right bundle branch block with a normal PR interval associated with occasional normal cycles and occasional blocked P waves.* This pattern is seen with bilateral asynchronous second degree blocks of the bundles, when the blocks are greater than 2-1.

VIII. *Alternating bundle branch block with one bundle branch block associated with a constant normal PR interval and the other bundle branch block associated with a variable PR interval that may be longer than normal. An occasional cycle would have normal PR intervals and QRS complexes and occasionally a P wave would be blocked.* This pattern is seen with a Wenckebach type of second degree block of one bundle branch and the usual type of second degree block of the other bundle branch.

IX. *Usual Wenckebach configuration with a normal QRS.* This pattern is seen with equal and synchronous Wenckebach 2° blocks of both bundle branches.

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Supported by the Herman C. Krannert Fund, the Indiana Heart Association, Indiana State Board of Health and the National Heart Institute (H.T.S. 5363, H-6308).

Dr. Gahimer is a trainee of the National Heart Institute.

X. *Second degree heart block with bundle branch block.* This pattern is seen with third degree block of one bundle branch and second degree block of the other bundle branch.

XI. *Wenckebach configuration with bundle branch block.* This pattern is seen with third degree block of one bundle branch and a second degree block of the Wenckebach type of the other bundle branch.

XII. *Alternating left and right bundle branch block with both blocks associated with a variable PR interval also occasional cycles are normal and occasionally P waves are blocked.* This pattern is seen with second degree block of the Wenckebach type involving both bundle branches when the blocks are asynchronous.

XIII. *Complete heart block with idioventricular rhythm.* This pattern is seen with bilateral third degree blocks of the bundle branches.

XIV. *Serial tracings showing different bundle branch blocks and different PR intervals.* This pattern is seen when the blocks of the bundle branches develop at different times.

Of these 14 different patterns which may be caused by bilateral bundle branch block only III, IV, VI, VII, VIII and XII can be diagnosed as such from a single electrocardiogram. Serial tracings are necessary to diagnose bilateral bundle branch block in type XIV above. When the other seven patterns are present in a single electrocardiogram, there is no way at present to differentiate those caused by bilateral bundle branch from those caused by the more usually accepted mechanisms.

Case Report

The patient was a 77-year-old man first seen in 1950, at which time ECG No. 1 was obtained (Figure 1). This tracing showed the pattern of complete left bundle branch block with a PR of 0.16 seconds and a QRS of 0.16 seconds. No further electrocardiograms were obtained until 1956. ECG No. 2, at that time, showed that the pattern of complete left bundle branch block was still present (Figure 1). The PR interval was 0.19 seconds and the QRS interval was 0.16 seconds. The only significant change was an increase in the PR interval from 0.16 seconds to 0.19 seconds.

ECG No. 3 was obtained in March, 1958, and showed the pattern of complete left bundle branch block with a 2:1 A-V block. The PR interval of the conducted beat was 0.20 seconds and the QRS interval was 0.18 seconds (Figure 1).

Taken by themselves these tracings would most likely be interpreted as indicating two lesions or one large lesion interrupting the conduction system in two different places and two different ways. One would postu-

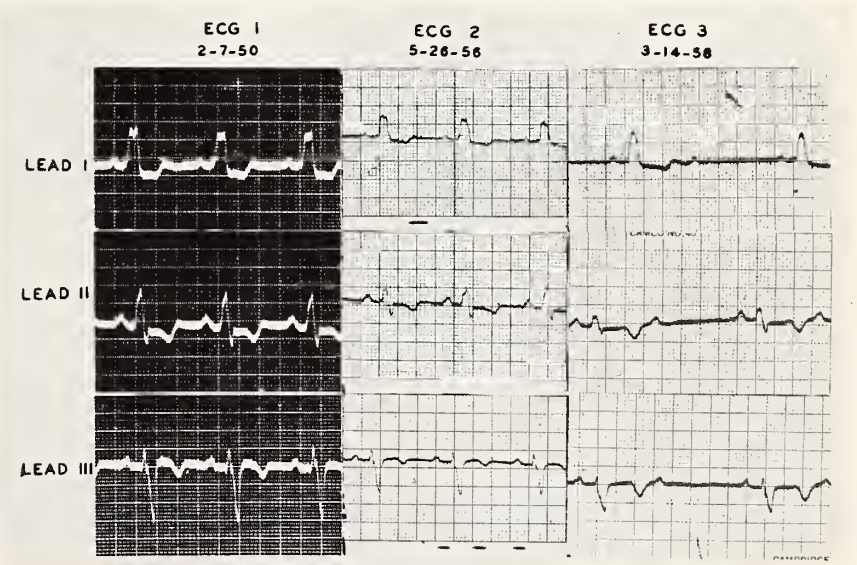


FIGURE 1

LEADS I, II and III of ECG Nos. 1, 2 and 3 are shown. The pattern of left bundle branch block is seen in all three ECG's. Note the 2:1 A-V block in ECG No. 3.

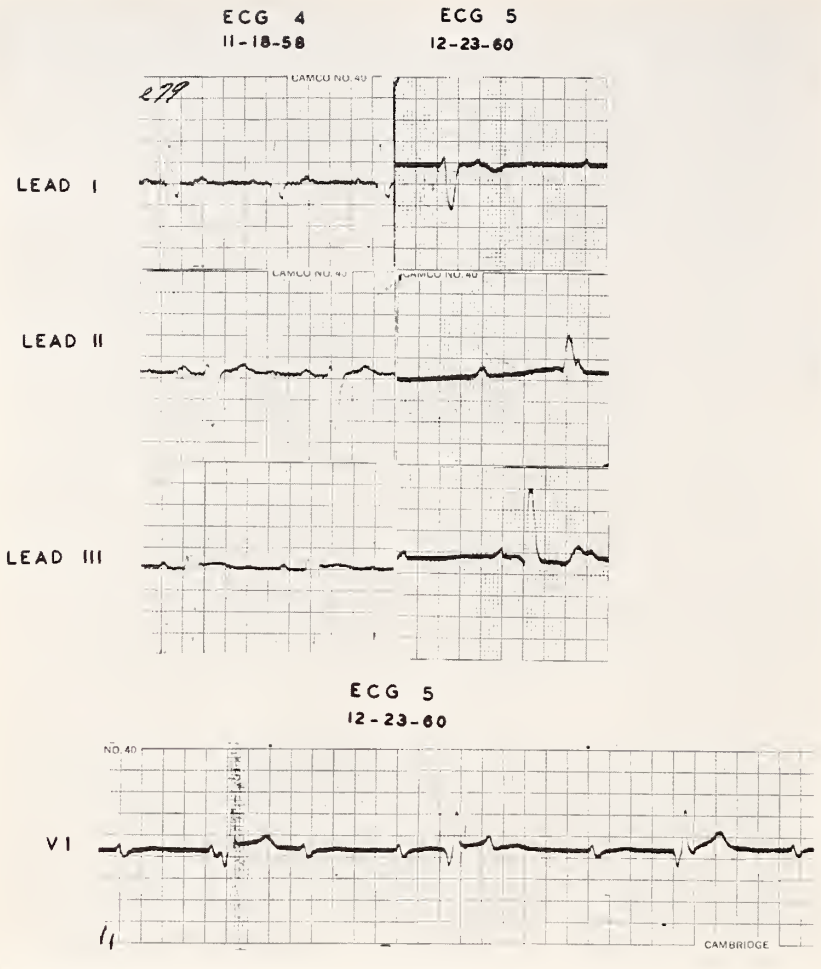


FIGURE 2

LEADS I, II and III of ECG Nos. 4 and 5 are shown. Also a long strip of Lead VI of ECG No. 5 is shown to better demonstrate the idioventricular rhythm with complete heart block. Note that the pattern in ECG No. 4 is that of RBBB with a PR of 0.28 seconds.

late a lesion completely interrupting the left bundle branch and either the same or a different lesion inducing a 2:1 block of the A-V node.

However, ECG No. 4 (Figure 2) obtained in November, 1958, reveals an entirely different pattern which is inconsistent with the above postulation. The pattern of complete right bundle branch block with an associated first degree A-V block was present. The PR interval was 0.28 seconds and the QRS interval was 0.16 seconds.

ECG No. 5 was taken in 1960, and revealed complete A-V block with an idioventricular rhythm of 28 beats per minute. The QRS interval at that time was 0.17 seconds (Figure 2).

This series of tracings proves that bilateral bundle branch block was present at the time tracing number four was taken. That is, a complete right bundle branch block and a left first degree bundle branch block are present. This is proven by the fact that the left bundle is conducting atrial impulses but only with a prolonged PR interval. Therefore, one must explain the pattern of left bundle branch block seen in the first three tracings by a first degree block of the left bundle branch which so delayed the atrial impulse that both ventricles were depolarized by the impulse which traveled down the right bundle branch. With the appearance of complete right bundle branch block in ECG No. 4, the impulse traveling down the left bundle branch passed on to the ventricle and depolarized it but only after considerable delay. This delay is estimated to be at least 0.08 seconds. This delayed conduction in the left bundle branch

therefore gives the pattern of left bundle branch block in ECG Nos. 1 through 3 and the long PR interval in ECG No. 4.

Armed with the knowledge that a right complete bundle branch block and a left first degree block are present in ECG No. 4 one would more logically explain ECG No. 5 as due to bilateral complete bundle branch block rather than to complete A-V nodal block. The latter explanation requires one to postulate another lesion and the former requires one only to postulate extension of the lesions already present in the bundle branches.

Figure 3 illustrates the conduction defects which we feel were present in each of the various tracings. The point must be emphasized here that one can only make the diagnosis of bilateral bundle branch block in this case by considering all the tracings together. In other combinations of blocks in both bundle branches this diagnosis can be made from only a single tracing. Much more frequently, however, one could not prove bilateral bundle branch block even though it was present.

Summary

This series of tracings illustrates two manifestations of bilateral bundle branch block. ECG No. 5 shows complete bilateral bundle branch block with an idioventricular rhythm. The combination of the first four tracings illustrate and prove complete right bundle branch block with first degree left bundle branch block in ECG No. 4.

ECG's No. 1 and 2 illustrate the additional point that the pattern of complete bundle branch block may be seen without complete interruption of the affected bundle but rather the affected bundle need only to delay transmission of the impulse until both ventricles are depolarized by the impulse from the unaffected bundle branch.

The correct explanation of ECG No. 3 is not apparent but we feel the most likely explanation is that of a first degree block of the left bundle branch combined with a temporary two to one block of the A-V node. This type of temporary conduction defect of the A-V node may be seen with digitalis excess.

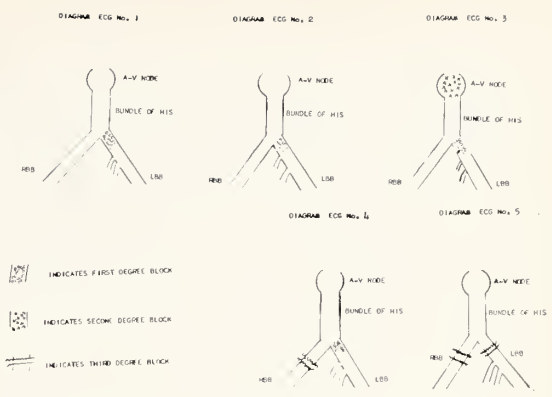


FIGURE 3

THIS FIGURE illustrotes in o diogrammatic way the lesians respansible for the canduction defects in ECG's 1 through 5 (Figures 1, 2). Diograms 1 and 2 shaw first degree block af the left bundle branch. Diagram number 3 shows first degree black of the left bundle bronch ond second degree block of the A-V node. Diogram 4 shows complete right bundle branch block ond first degree block af the left bundle branch block. Diogram 5 shows complete block af bath the left and right bundle branch.

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Report of a Case Surviving Past 44 Years of Age

Tetralogy of Fallot

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TETRALOGY OF FALLOT is a combination of ventricular septal defect, pulmonary stenosis, "over-riding" aorta, and right ventricular hypertrophy.[1] It is the most common form of cyanotic congenital heart disease compatible with survival past childhood.[2] However, most victims die young, and the number surviving the third decade is comparatively few.[3] Approximately 30 cases surviving past the age of 40 have been reported; of these only four were reported when alive.[4-7] The most famous was that of a noted American musician who lived to the age of 59.[8] The two oldest cases on record survived to the age of 69.[9, 10]

Case Report

The patient, a janitor, was first seen at Marion County General Hospital in November, 1949, at the age of 32. At that time he complained of having had night chills and sweats for about six weeks. He also noticed increasing shortness of breath, fatigue and weakness of his legs during this time. He was anorexic and had had frontal headaches for two weeks. Fever of 102° was noted three weeks before admission by his family doctor who prescribed an unknown medication which the patient took for several days.

The patient's past history revealed he had had "heart trouble" his entire life. Whether the patient was cyanosed at birth is indefinite, but intermittent cyanosis had been present since school age. He did not participate in athletics because of exertional dyspnea, and he was rejected from the armed services because of a "heart ailment." Nevertheless, the patient carried on normal activity including golf until time of admission.

Growth and development were normal. Blood pressure was 120/68, and the heart rate 80 and regular. The patient appeared slightly cyanotic and exhibited marked clubbing of all extremities. Numerous caries of the teeth were noted. The chest was clear, and the heart slightly enlarged. An easily palpable thrill was present in the 3rd intercostal space to the left of the sternum. A loud systolic murmur was present in the same area, but could be heard over the entire precordium. P_2 was greater than A_2.

No abdominal viscera were palpable, and no other system abnormalities were noted. The hemoglobin was 14.8 grams and the hematocrit reading was 49. The white blood count varied between 6,900 and 10,500. The differential was normal. Urinalysis was also normal. Sedimentation rate was 16 mm. Three successive blood cultures taken on the first, fourth and fifth hospital days grew non-hemolytic streptococci. An electrocardiogram revealed a P-R interval of .24 seconds, right axis deviation, and RVH. A PA chest x-ray showed the cardiac shadow to be enlarged, predominantly RVH. The pulmonary artery shadows were prominent and hypoplasticity of the aorta was thought to be present.

The clinical diagnosis was Eisenmenger's complex with sub-acute bacterial endocarditis. The patient remained afebrile throughout his hospital stay. Beginning on the sixth hospital day he was treated with penicillin, 1,000,000 U daily for seven

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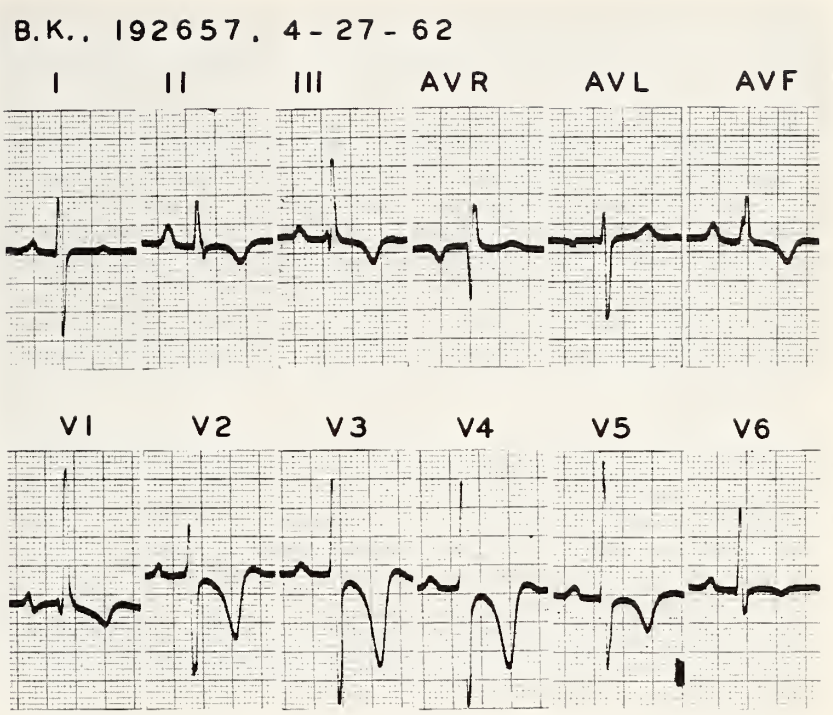


FIGURE 1
ELECTROCARDIOGRAM shaws tall P waves, a P-R interval af 0.24 secands, right axis deviatian, right ventricular hypertraphy and deeply inverted T waves.

weeks. Repeated blood cultures showed no growth and recovery was uneventful. He was discharged and followed in the outpatient clinic until 1952.

Second Admission

At age 44, the patient was referred to the Robert Moore Heart Clinic, Marion County General Hospital, by his employer for evaluation of a heart murmur. The patient continued to have intermittent cyanosis and moderate exertional dyspnea, but noted no increase in symptoms over the previous 12 years. Physical examination revealed marked clubbing but no cyanosis. Jugular veins demonstrated large A waves. There was a diffuse lift at the left sternal edge. P_2 exceeded A_2. A systolic thrill and murmur were present in the left third intercostal space. No other murmurs were noted. The hemoglobin was 16.5 grams. An electrocardiogram (Figure 1) showed little change from 1949, except for deeper inversion of the T waves. Cardiac fluoroscopy revealed RVH, prominent pulmonary artery shadows and normal pulmonary vascular markings (Figure 2).

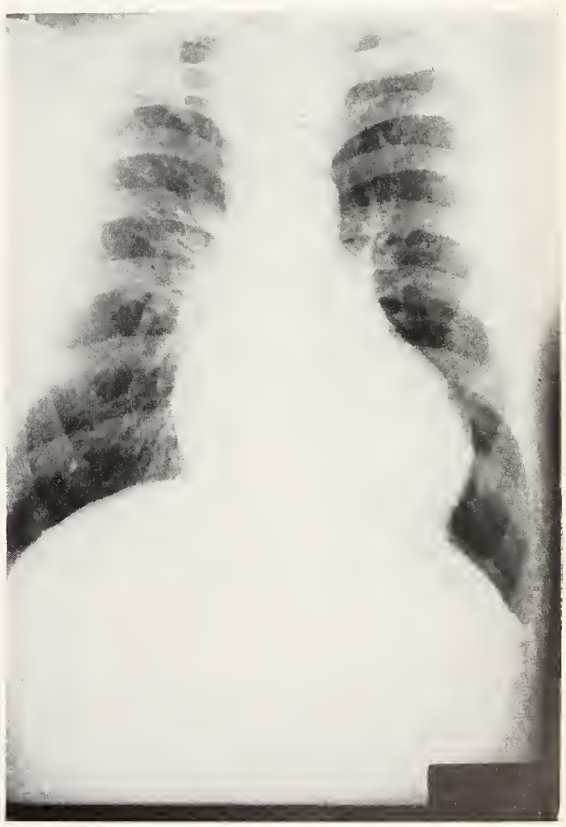


FIGURE 2
PA CHEST X-RAY demanstrates slight cardiamegaly, a prominent pulmonary conus and normal pulmonary vasculature.

Catheterization Data

Cardiac catheterization was performed on 9-25-62. The catheter easily passed from RV into the ascending aorta. The pulmonary artery was entered with some difficulty. At one time the catheter was thought to have crossed a patent foramen ovale.

Intracardiac shunting of blood was assessed using the cardiogreen indicator dye dilution technic.[11] This method consists of rapidly injecting a bolus of dye in a cardiac chamber and continuously sampling blood from a systemic artery through a cuvette. The result is a time concentration curve from which the appearance time, recirculation time and the approximate degree of shunting can be determined.

In Figure 3, the top curve was obtained by injecting dye in the right ventricle and sampling from the femoral artery. A right to left shunt at the ventricular level is demonstrated by the small early hump 3.5 seconds after injection. The second dye curve, obtained by injecting in the pulmonary artery and sampling from the femoral artery, demonstrates that the catheter is now beyond the level of the right to left shunt. In addition, a significant left to right shunt is demonstrated by the slow trail off of the curve which is due to abnormally early recirculation of dye.

The pressure and oxygen studies (Table 1) show an increase in oxygen saturation in the right ventricle and main pulmonary artery substantiating the left to right shunting at the ventricular level. The aortic systolic and right ventricular systolic pressures

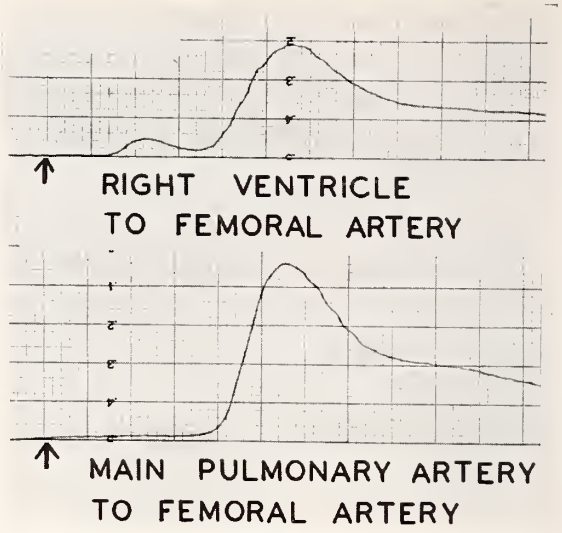


FIGURE 3

CARDIOGREEN DYE curves obtained during cotheterizotion. The arraw indicotes the time of injection. (Smoll vert. lines = 0.5 sec.) In the top curve, o right to left shunt is demonstrated by the smoll eorly hump. Absence af this hump in the second curve indicates the cotheter tip is post the point af right to left shunting. In oddition, the slow downslope and early recirculatian hump of the second curve indicotes significant left to right shunting.

are equal. The peripheral desaturation did not change with mild exercise. A resting systolic gradient of 90 mm.Hg. exists across the pulmonary valve. Cineangiograms revealed pulmonary infundibular stenosis, ventricular septal defect, and over-riding of the aorta. The patient tolerated the procedure without complications and has returned to work.

Discussion

Attempts to correlate anatomic findings with longevity in tetralogy of Fallot have

CATHETERIZATION DATA

Location	Pressure S/D	Pressure Mean	Oxygen (Van Slyke) Content	Oxygen (Van Slyke) Saturation
Inf. Vena Cava			15.11	70.1%
Sup. Vena Cava			12.00	55.6%
R. Atrium			13.97	64.8%
R. Ventricle	125/0		15.83	73.4%
Main Pulm. Artery	35/10	(15)	16.33	75.7%
exercise	52/20	(28)		
Central Aorta	125/85	(98)	19.79	91.8%
exercise	165/100	(120)	19.72	91.5%

Table 1

been unsuccessful.[10, 12] The degree of pulmonary stenosis has been highly variable, ranging from mild in the present case to pulmonary atresia with a patent ductus in another case.[13] The size of the ventricular septal defect has also been highly variable. The degree of cyanosis likewise bears no relationship to longevity.[10] Attempted surgical correction in patients past 40 has never been reported.

The incidence of subacute bacterial endocarditis in tetralogy of Fallot has been reported to exceed 25% in patients over age two.[14] Others have stated that subacute bacterial endocarditis is uncommon in tetralogy.[15] Large series statistics are unavailable. Subacute bacterial endocarditis was not mentioned in any of the previous case histories of patients surviving past 40, and would therefore seem to be exceptionally uncommon.

Only one previous patient had cardiac catheterization. This patient, a 56-year-old male, demonstrated a mild pulmonary stenosis with predominant left to right shunting through the ventricular septal defect. The data is similar to the present case.

Summary

A 44-year-old male with tetralogy of Fallot diagnosed by cardiac catheterization is presented. This case is unusual in having been complicated by subacute bacterial endocarditis.

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An Unusual Form of Atrioventricular Nodal Rhythm Due to Digitalis

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TRADITIONALLY overdosage of digitalis has been associated with the appearance of almost any of the accepted forms of cardiac arrhythmia. Presented are two cases of an arrhythmia that to our knowledge have not been previously described in association with digitalis overdosage. In addition, tracings are presented that were taken from dogs that had been digitalis intoxicated and showed the same or similar arrhythmia.

Case Reports

Case #1 A 68-year-old female was admitted on 12-29-59 with diabetic acidosis, cerebral thrombosis of one week's duration, hypertension, chronic renal failure and marked dehydration. The patient had received reserpine, chlorthiazide and approximately 0.9 mg of digitoxin over the past three days. An admission electrocardiogram showed sinus rhythm and left ventricular hypertrophy with strain. The blood urea nitrogen was 141 mgm % on admission but fell to 26 mgm % over the next two weeks.

The patient was treated with parenteral fluids, insulin and given an additional 0.4 mg of digitoxin intramuscularly on admission and 0.1 mg intramuscularly daily thereafter. The patient's condition improved rapidly on this therapy, but she suddenly expired on 1-12-60. The electrocardiogram shown in Figure 1 was taken on 1-4-60.

Case #2 A 68-year-old male was admitted on 4-18-60 for chronic renal failure, generalized arteriosclerosis, and congestive heart failure secondary to coronary arteriosclerosis. He was treated with bed rest, low sodium diet, diuretics, and digitoxin 1.2 mg during the first 24 hours and 0.1 mg daily thereafter. Admission ECG showed sinus tachycardia and nonspecific ST-T wave changes. Despite therapy, the patient's condition improved only slightly and the blood urea nitrogen remained at 65 mg %. An ECG on 4-27-60 showed nodal tachycardia with intermittent A-V dissociation, but digitoxin was continued until 5-4-60. The ECG shown in Figure 2 was taken 5-5-60.

Description of ECG's

Figure 1 shows the tracing from the first case. The entire tracing is lead II and is part of a long tracing. The first strip in the figure represents an example of second degree A-V block with a 3:2 ventricular response. The P-R interval is 0.36 second. The QRS is of normal duration and the configuration is the same as had been noted previously when a normal sinus rhythm was present. In the second strip the rhythm has changed. The first four beats in the strip represent a sinus tachycardia at a rate of 125. A first degree A-V block exists as the P-R interval is 0.36 second. The P waves are buried in the S-T segment of the preceding beats. The QRS configuration is the same as in the preceding strip and represents the patient's normal condition through the conducting system.

The fifth beat in the second strip is the first beat of what is obviously a different rhythm. The polarity of the QRS is opposite to that of the normally conducted beats. The duration of the normally conducted beats is

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Supported by the Herman C. Krannert Fund, the Indiana State Board of Health, the Indiana Heart Association and the National Heart Institute (H.T.S. 5363, H-6308, OH 91).

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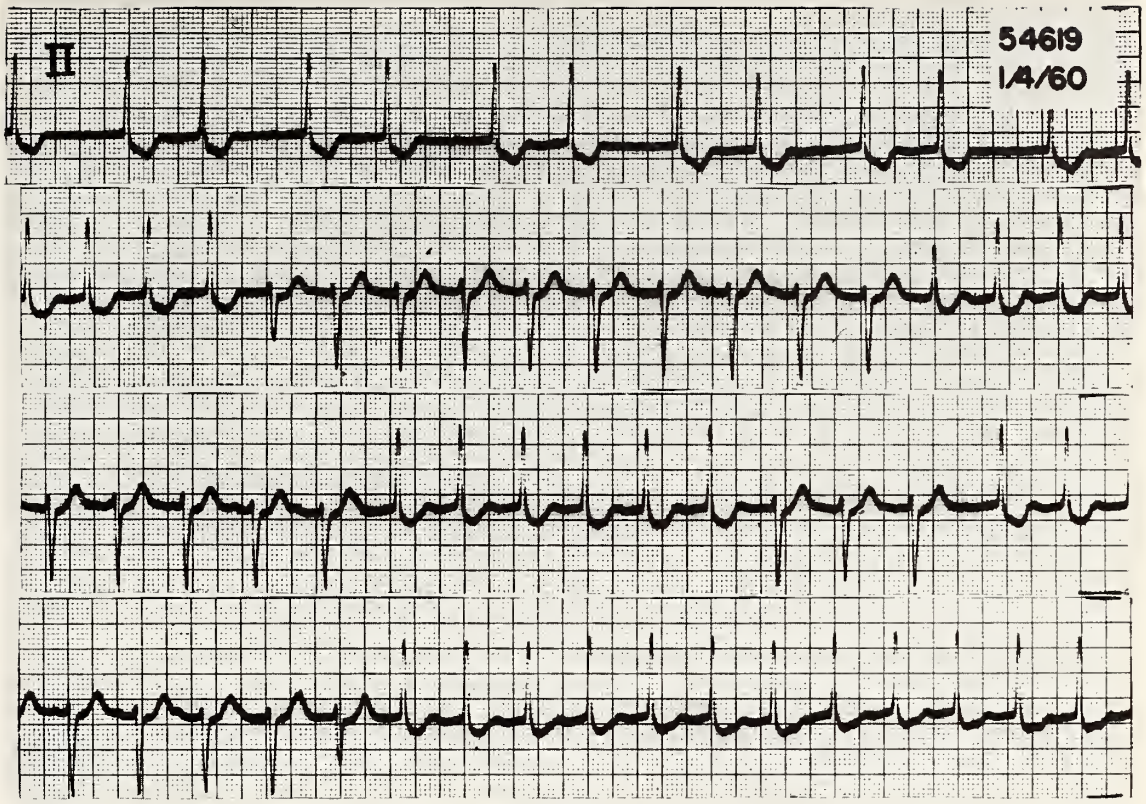


FIGURE 1

THIS IS ILLUSTRATIVE of the arrhythmia in question. For details see text.

difficult to measure due to the sagging of the S-T segment. The QRS of the ectopic beats are 0.09 second, which may represent a slight increase but is still within normal limits. The first beat of the ectopic rhythm has a smaller amplitude than the remainder of the beats in the ectopic rhythm. This represents a fusion beat between QRS illustrated in the first and sixth complex of this strip. The 4th beat from the end of the strip also is slightly different from either of the two types of QRS response and is a fusion or combination beat.

During the course of the ectopic rhythm, the P wave was seen on the original tracing although it does not stand out in the reproduction. The P-P interval is maintained throughout the ectopic rhythm but has no fixed relationship to the QRS. This implies that during the course of the ectopic rhythm there is a dissociation due to interference.

The third and fourth strip are again illustrative of the interplay between the two foci present.

Figure 2 shows a similar phenomenon. The upper three strips, dated 4-21-60 show a sinus tachycardia. These strips also illustrate the configuration of the QRS associated with normal conduction. The lower three strips represent the arrhythmia presumably secondary to digitalis overdosage. The arrhythmia is best illustrated in V1 and V5. In lead V1 the basic rhythm is A-V dissociation due to interference. P waves are in evidence throughout the lead at an atrial rate of about 84. The P waves are regular and have no relation to the various QRS complexes with the exception of the 6th QRS. This complex appears slightly earlier than the expected beat and the P wave is clearly visible with a P-R interval of 0.22 second. This represents a "capture"

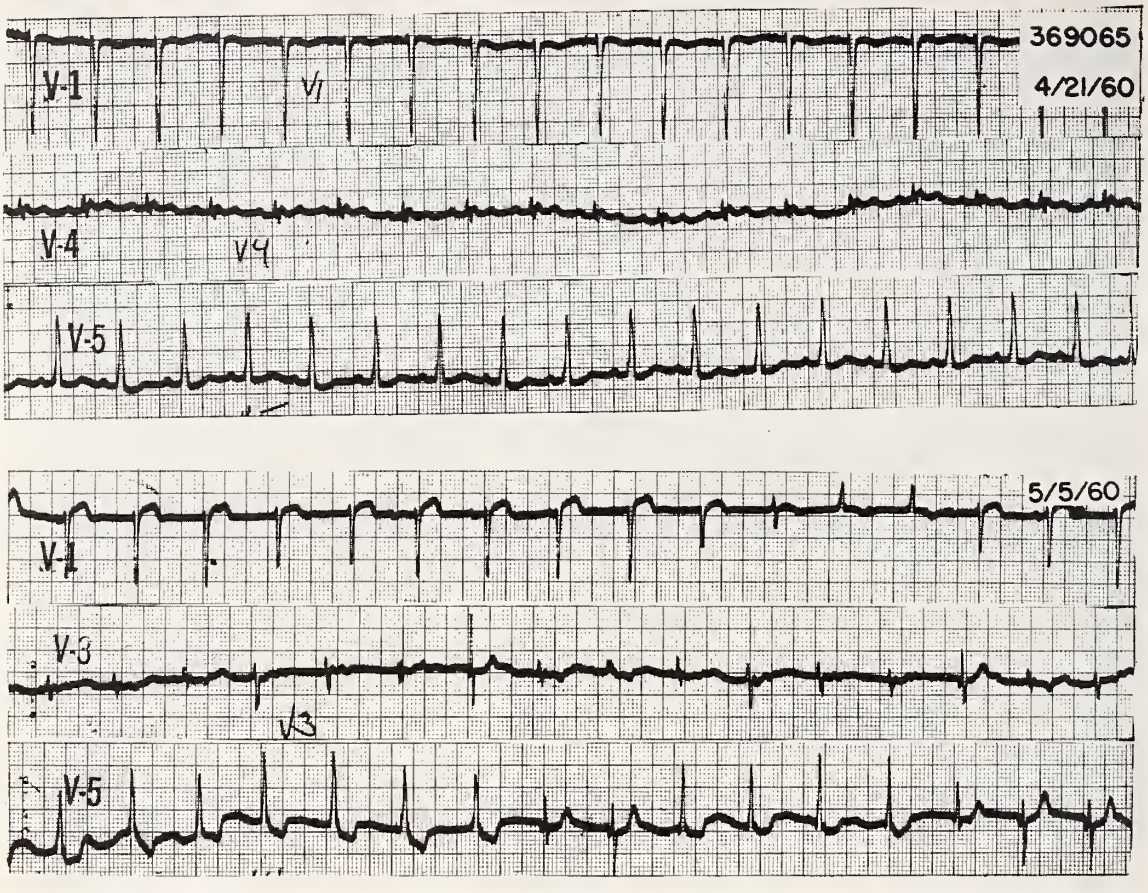


FIGURE 2

THE UPPER THREE strips show normal rhythm. The lower strips represent the arrhythmia. For details see text.

beat and verifies that an intermittent A-V dissociation exists.

The ventricular response in the initial part of lead V1 is at a rate of 94 and regular. The configuration of the QRS complex is reminiscent of that seen in lead V1 of the upper tracing and confirms that a supraventricular focus, probably A-V nodal, is pacing the heart at this point. The 12th and 13th QRS complexes are very different from the preceding ones. In spite of the difference in polarity, the QRS duration remains 0.08 second just as in the preceding rhythm. These complexes are also preceded by two beats (10th and 11th QRS) which represent a fusion of the two basic QRS patterns. At the end of the strip the QRS configuration has once again returned to the previous pattern. The remaining two strips show a continuation of the same process.

Figure 3 shows tracings taken from two dogs during a digitalis experiment. The procedure is described in the legend. In the upper strip the rhythm is initially a sinus mechanism at a rate of about 188. The QRS duration is 0.05 second and P waves are clearly discernible with a P-R interval of 0.10 second. About the middle of the tracing the configuration of the QRS complex becomes different. The polarity of the complex has reversed although the QRS duration has only gone from 0.05 sec. to 0.07 sec. The rate of the ventricles has slowed slightly to 176 beats per minute.

The P wave is no longer clearly visible but is present and superimposed on the T wave. The beat just preceding this sudden change in configuration has characteristics common to both types of QRS complexes and is a fusion beat. Note that the P-R interval of this beat is now 0.06 second instead of 0.10 second.



FIGURE 3

ELECTROCARDIOGRAMS of dogs showing digitalis intoxication. The top record was obtained 10 minutes after intravenous injection of acetyl-straphanthidin, 3.3 cat units. The bottom record was taken one minute after intravenous injection of 6.9 cat units. Both records are representative of digitalis intoxication in the dogs.

The lower strip, recorded in a different animal, shows a similar phenomenon. The first three P waves are not conducted indicating A-V dissociation. The rate of the ventricles is 188. The fourth beat once again represents a transition between two very different QRS configurations and is a fusion beat. The latter is followed by sinus rhythm at a rate of 188. Each QRS is preceded by a P wave with a fixed P-R interval of 0.10 second.

Two beats seen at the end of this run of sinus rhythm are combination beats (QRS 16, 17 from the left). The remainder of the tracing shows the QRS that is reversed in polarity. The QRS during the sinus mechanism is 0.04 second and this changes to only 0.06 second during the presence of the aberrant QRS configuration.

Discussion

The problem seems to be mainly one of differential diagnosis of the peculiar waxing and waning character of the QRS.

The most attractive explanation in this process is that these represent A-V nodal rhythm with ventricular aberration. This concept has been described by several authors.[1-4] It is the aberrant ventricular beats that give rise to the reversed polarity of the ectopic rhythm. The presence of fusion beats implies that more than one impulse is stimulating the myocardium. Fusion beats are usually seen in the presence of ventricular rhythms and are important in confirming the presence of a ventricular tachycardia. In the usual ventricular tachycardia the QRS duration is greater than 0.12 second.

In the examples we have used the QRS duration never lengthens that much. The exception to the broadening of the QRS would occur if the source of the ectopic ventricular rhythm lay in the septum equidistant from the right and left bundle. This would permit the ectopic impulse to travel from its site of origin to the conducting system. If a supraventricular impulse was propagated and met an ectopic impulse in the conducting system then a fusion beat would occur. Since most of the ventricular conduction would occur via the normal conducting system then the QRS duration in this case would probably be normal.

This mechanism is one explanation that could account for the arrhythmia presented here. It seems unlikely, however, that random cases of digitalis overdosage should have such a predilection for such a specific focus in this septum. This is especially the case in the dog studies since this sort of pattern was frequently noted.

If this is basically a nodal rhythm, then the explanation offered by Pick[1] would be

appropriate. He suggests that the nodal impulse might be transmitted to the ventricle by an accessory pathway known as the paraspecific fibers of Mahaim. These pathways have been shown to exist anatomically by Mahaim[5] and by Lev and Lerner.[6] It must be granted that no proof yet exists that the paraspecific fibers of Mahaim are capable of conduction, however, this theory of impulse transmission provides a ready explanation for the observed phenomenon. Fusion beats occur in this process when an impulse is transmitted through the normal conducting system and meets an impulse transmitted via the accessory fibers.

If the paraspecific fibers of Mahaim then become the dominant pathway of transmission then the aberrant manifestations of the A-V nodal rhythm will become apparent. Walsh[4] recently described 23 cases and some of his illustrated examples were very similar to those presented here. The interesting addition here is the part that digitalis may play. Previous papers have made no specific reference to the status of digitalization of the people with this phenomenon. It is not proposed that this is pathognomonic of digitalis overdosage since similar arrhythmias have been observed in the absence of digitalis. The examples obtained in the laboratory (Figure 3) suggest, however, that digitalis intoxication is capable of producing this peculiar arrhythmia.

Summary

1. Two cases of A-V nodal rhythm with ventricular aberration are presented. The arrhythmia has a peculiar waxing and waning characteristic of the QRS complexes and is associated with fusion beats. It is proposed that the combination beats result from fusion of impulses originating in S-A node (Figure 1) and A-V node (Figure 2). These impulses fuse in each instance with impulses originating in A-V node and arriving in the ventricles via the paraspecific fibers of Mahaim.

2. Confirmatory evidence is cited that in animals digitalis intoxication is capable of producing the same arrhythmia.

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Hemodynamically Insignificant Systolic Murmurs

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THE PROBLEM of evaluating heart murmurs is indeed difficult at times. The murmurs are especially perplexing when they are detected on a routine physical examination with no history or symptoms of any cardiovascular disease. The problem is even further complicated when one finds some borderline irregularities on the EKG and/or chest x-ray. Such situations frequently arise in adolescents and young adults.

We recently had three such cases. Despite the usual diagnostic procedures, the significance of the murmurs was in doubt. This necessitated the use of cardiac catheterization.

These three cases are the subject of this report.

Case Reports

Case No. 1 A 16-year-old white male was referred to the Indiana University Medical Center for evaluation of a heart murmur. The patient and his parents denied any history of rheumatic fever or knowledge of a murmur prior to a recent routine physical examination by a local physician. No definite cardiorespiratory symptoms could be elicited. Physical examination revealed a slightly obese 16-year-old boy who was in no distress. His blood pressure was 140/70 and the pulse was 80 and regular.

The only pertinent physical findings were limited to the cardiovascular system. The heart was not thought to be enlarged with the PMI being diffuse but otherwise normal. There was a small heave along the left sternal border. The pulmonic second sound split fairly persistently; however, it did vary with respiration in the usual manner (Figure 1). There was a grade II to III systolic murmur along the left sternal border in the fourth intercostal space (Figure 1). It radiated to the apex and base of the heart but not into the neck. The murmur did not change appreciably with respiration or with change in posture.

The EKG showed an axis of +15°, a tall R in V1 and inverted T waves in leads V1 to V4 (Figure 1). Cardiac fluoroscopy was interpreted as "consistent with, but not diagnostic of, a small patent ductus arteriosus." Because of the borderline EKG and fluoroscopic findings, no one was willing to write off the murmur as an "innocent" functional murmur; thus the patient had cardiac catheterization performed.

At cardiac catheterization the patient's cardiac output was 8.0 1/min. with an index of 3.9 1/min/M^2 at rest. With vigorous exercise (0_2 consumption of 1075 cc/min) the output rose to 15.7 1/min. with an index of 7.6 1/min/M^2. The pressures on the right side of the heart were normal at rest and with exercise, and there was no change in 0_2 content from the vena cavae to the left pulmonary artery. Cardiogreen dye curves confirmed the fact that no shunt was present.

Although the exact nature of the murmur is still not known, no abnormal cardiovascular condition exists. The large stroke volume (103 cc at rest and 150 cc with exercise) may have contributed to the genesis of the murmur. A brief investigation ruled out any disease as the cause of the relatively high cardiac output, and actually because of the boy's large size the cardiac index was not abnormal.

Case No. 2 A 21-year-old white female was referred to Indiana University Medical Center because of a heart murmur noted during an examination for life insurance. The murmur was followed by her local physician for about a year without any

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Supported in part by the Krannert Fund, the Indiana Heart Association and the U. S. Public Health Service (H-6308, H.T.S. 5363).

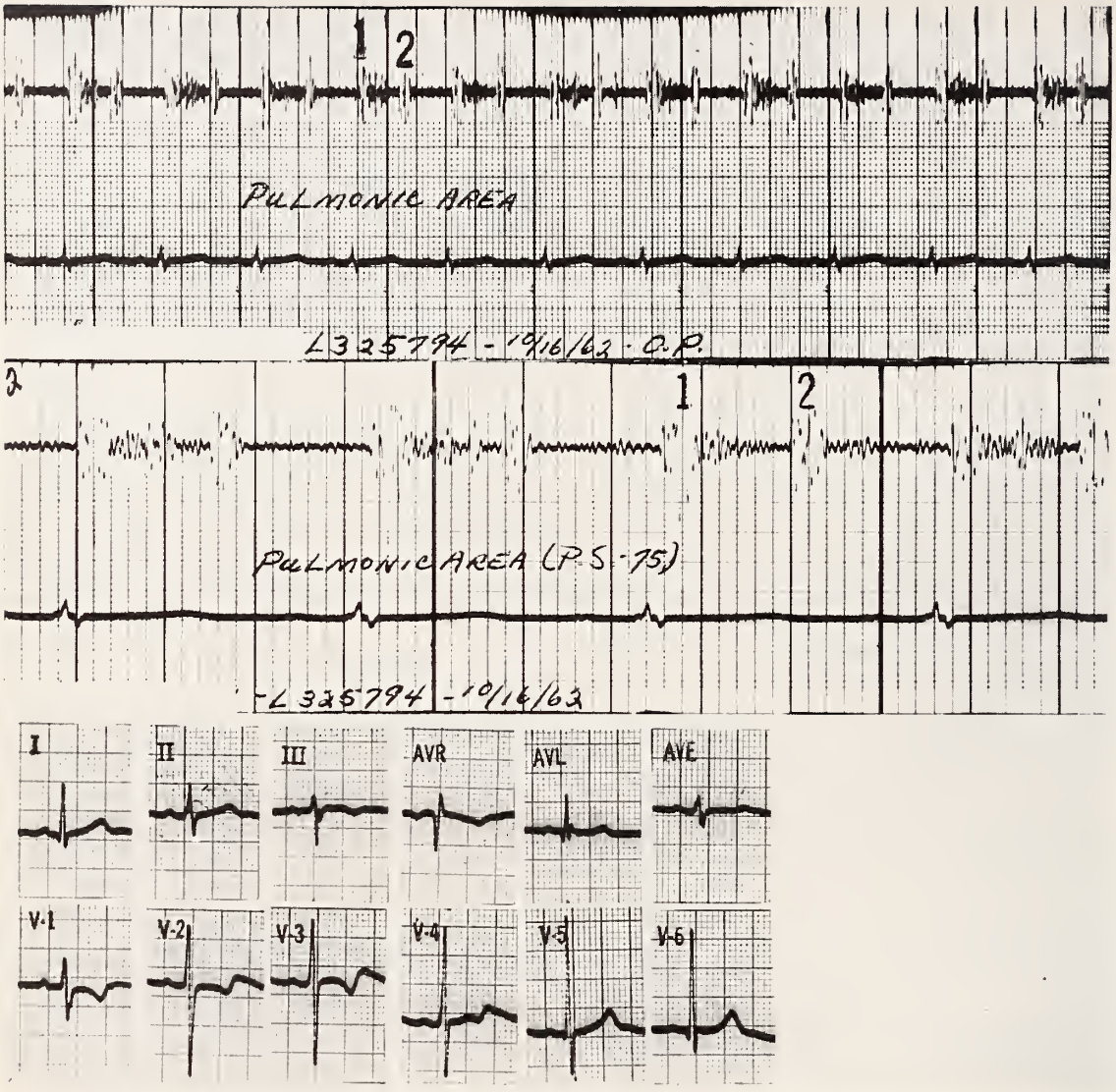


FIGURE 1

THESE TRACINGS are from case #1. The top two strips are phonocardiograms. The first and second heart sounds are clearly identified. The second sound is split with the split varying with respiration. There is an early ejection type systolic murmur which stops short of the second sound. The EKG is at the bottom and reveals a tendency toward a left axis, a tall R in V1 and inverted T waves in V1-V4.

change. The patient denied any previous knowledge of a murmur and wasn't aware of having had rheumatic fever. No cardiorespiratory symptoms could be elicited; however, she had had pneumonia twice as a child. Her family history was negative for cardiovascular disease.

The patient was a well developed, well nourished, white female in no distress. Her blood pressure was 128/68 and the pulse was 74 and regular. Both a systolic thrill and murmur were found along the left sternal border in the fourth intercostal space (Figure 2). No evidence of cardiomegaly was noted, and the heart sounds were felt to be otherwise normal.

The EKG showed a definite tendency toward right axis deviation, inverted T waves in leads III and AVF, flat T in lead II and fairly peaked tall T waves in V2-V4 (Figure 2). Cardiac fluoroscopy was interpreted as "suggestive of patent ductus arteriosus or a mild aortic valvular stenotic lesion."

Cardiac catheterization was performed at which time both right and left heart

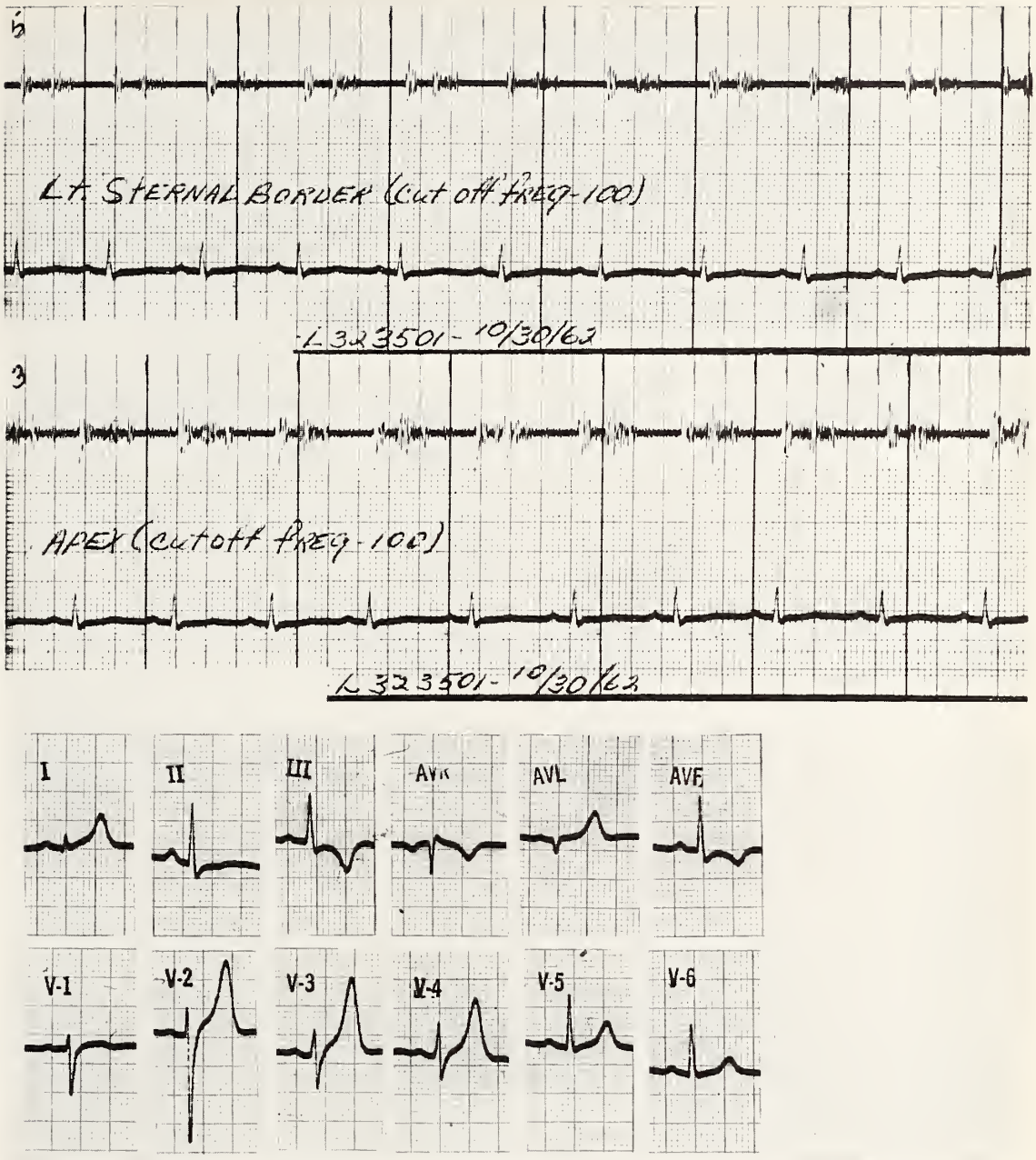


FIGURE 2

THE PHONOCARDIOGRAMS and EKG illustrated are from case #2. There is a mid to late systolic ejection type murmur. At times a systolic click can be identified within the murmur. The EKG shows a flat T in lead II, inverted T waves in leads III and AVF, as well as tall T waves in V2-V4. This combination of murmur and T waves changes has been described as an "electrocardiographic-auscultatory syndrome" (see text).

studies were done as well as selective cineangiocardiography. Pressures in all four chambers of the heart were normal; there was no significant pressure gradient across any orifice; and there was no evidence of any shunt by 0_2 determinations, cardiogreen studies or selective cineangiocardiography. Her cardiac output was 6.6 1/min with an index of 4.2 1/min/M^2. With moderate exercise these values were raised to 8.6 and 5.5 respectively.

This patient fits into a characteristic electrocardiographic-auscultatory syndrome mentioned in a review by Humphries and McKusick.[1] The essential features of this group of patients were a mid to late systolic murmur, flat or inverted T waves in EKG leads II, III, and AVF, tall peaking of T

waves in mid precordial leads, and no demonstrable cardiovascular abnormality. The frequent presence of a systolic click and a history of possible antecedent pericarditis in some cases suggests that the sound may be due to old, healed pericarditis. The phonocardiogram in Case No. 2 does seem to demonstrate a systolic click at times (Figure 2).

Case No. 3 A 16-year-old white female was referred to Indiana University Medical Center for evaluation of a long standing heart murmur. She had been diagnosed as having heart trouble at the age of six. She was put to bed for a year at age 10 because of a heart murmur and pain and swelling of her legs. Her joints were apparently not involved at the time. She had never complained of shortness of breath, chest pain, weakness or other cardiorespiratory symptoms. The murmur was recently rediscovered during a routine examination.

Physical examination revealed a slightly obese girl with a blood pressure of 130/80 and a regular pulse of 82. There was a right ventricular heave along the left sternal border, a fairly fixed, widely split second heart sound, a systolic thrill and a grade III to IV ejection type systolic murmur along the left sternal border and the pulmonic area (Figure 3). The EKG showed a tendency to right axis deviation but otherwise was normal (Figure 3).

Cardiac fluoroscopy revealed the central pulmonary arteries to be slightly enlarged with increased pulsations. Both the right atrium and right ventricle were thought to be enlarged. The radiologist felt these findings were consistent with an intracardiac left to right shunt—probably an atrial septal defect.

Both right and left cardiac catheterization failed to demonstrate any abnormalities. The pressures, 0_2 determinations and cardiogreen dye-dilution curves were normal both at rest and with exercise. Her cardiac output was 5.5 1/min with an index of 2.9 1/min/M^2 at rest. The output rose to 9.5 1/min with moderate exercise.

The cardiac catheterization data surprised almost everyone who had examined the patient. Most examiners were fairly confident that this patient had a left to right shunt, probably an atrial septal defect. No one called the murmur hemodynamically insignificant prior to catheterization. A small abnormality such as a moderator band in the right ventricle or a tiny muscu-

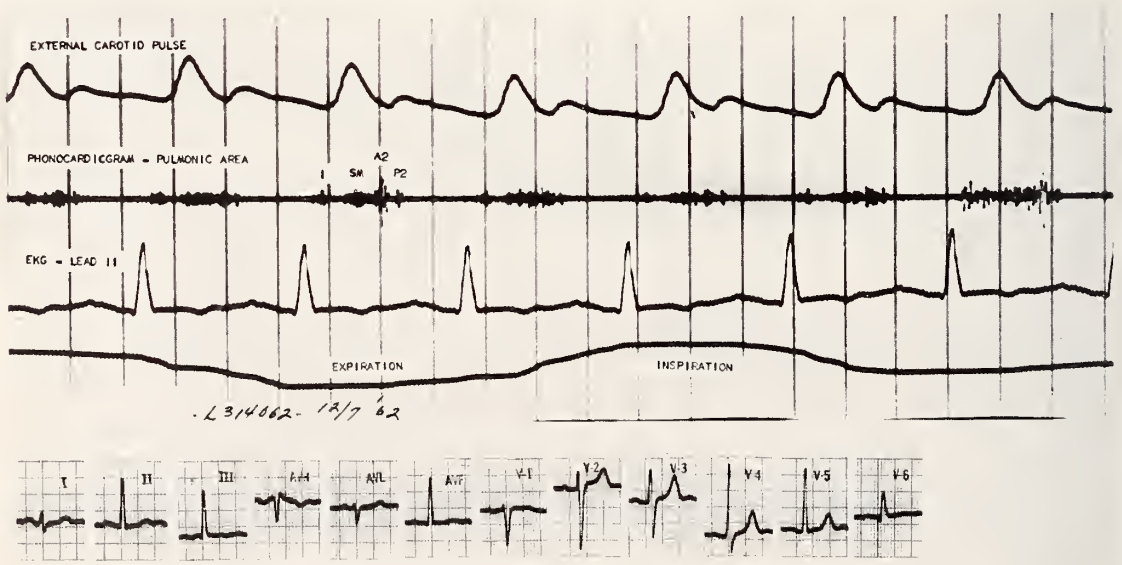


FIGURE 3

THE TOP SET OF TRACINGS ore simultaneous externol caratid, phonacardiagrom, EKG, ond respiratory recordings. The phonocardiogrom was token in the pulmonic orea. The aartic second sound is identified by the notch on the down slope of the corotid pulse. There is o well seen separotion of the twa components af the second sound with very little voriotion with respirotion. The murmur is of the ejection type occupying the last two thirds of systole. The EKG at the bottom shows some right oxis deviotian.

lar ventricular septal defect could exist and be missed at catheterization; however, even if present, it apparently produces only noise, not any significant alteration in hemodynamics.

Discussion

Although the cases presented here needed the use of cardiac catheterization for a definitive diagnosis, most systolic murmurs, fortunately, can be evaluated clinically. Our knowledge and understanding of heart sounds and murmurs have been greatly enlarged with the advent of phonocardiography. Although no presently available machine can detect and filter sound as well as the human ear, the phonocardiogram does help us to visualize and better understand what we hear. The objective illustration of systolic murmurs allows for a classification which might be helpful in understanding the physiology of the murmurs as well as identifying their origin.

A classification suggested by Leatham meets these criteria fairly well.[2] He divides systolic murmurs into either ejection or regurgitant in nature. A third possible category might include extravascular sounds, such as pericardial rubs and cardiorespiratory sounds, which are frequently confused with true murmurs. Although these sounds are synchronous with cardiac activity, they are not true murmurs in that they are not produced by the flow of blood. Fortunately these extravascular sounds can be usually identified by either their scratchy quality, by their relationship to respiration, or with the help of other clinical data.

The regurgitant systolic murmur begins with the first heart sound, lasts throughout systole and is essentially uniform in intensity. Such a murmur occurs when blood flows from a high pressure area to one of low pressure. Examples would be mitral insufficiency, ventricular septal defect and tricuspid insufficiency. Although these murmurs are also classified as pan or holsystolic, they may actually extend through the second sound and drown it out because the pressure differential may still be present after the closure of the semilunar valves. Some abnormal conditions with both systolic and diastolic murmurs have a regurgitant systolic component. This category would include such entities as patent ductus arteriosus, aortopulmonary window, coronary arteriovenous fistula, and truncus arteriosus, all of which have an abnormal flow of blood from a high to a low pressure area. Regurgitant pansystolic murmurs are nearly always indicative of some pathologic condition.[1]

Sometimes the amount of regurgitant blood is not enough to produce a murmur lasting throughout systole. These murmurs thus begin with the first heart sound and then die off before the second heart sound. McKusick chooses to place these murmurs in a separate category calling them "decrescendo murmurs."[1] Examples would include a mild mitral insufficiency due to either valvular deformity or dilatation of the annulus or a ventricular septal defect with pulmonary hypertension and only a small left to right shunt. Such a murmur may be heard in adults with no demonstrable disease. Using very sensitive recording equipment, such murmurs can be detected in a majority of normal adults.[3]

The other major category of systolic murmurs is the ejection murmur. Such a murmur is generated when the smooth flow of a sufficient amount of blood is disrupted by a change in the caliber of the vascular container producing turbulence, sound waves and the resultant murmur.[4] These murmurs are commonly produced by the ejection of blood from the ventricles into their respective arteries. The murmurs begin with the opening of the semilunar valves, with or without an ejection click, build up in intensity with rapid propulsion of the blood in early or mid systole, and then die off rapidly, usually terminating before the second heart sound. Thus on a phonocardiogram the murmur is diamond shaped, occurring in early or mid systole. The classic pathologic ejection murmur is aortic stenosis.[5]

Ejection murmurs need not always occur early in systole. The ejection type murmurs of coarctation of the aorta or "mammary souffle,"[6] which occurs in women late in pregnancy or while lactating, are late in systole because of the distance of the origin of the murmur from the heart. There is a slight delay before the ejected bolus of

blood reaches the murmur producing area.[7] The relatively recently recognized entity of hypertrophic subaortic stenosis may have an ejection type murmur occurring late in systole due to a prolonged and delayed propulsion of blood from the left ventricle.

Whereas the regurgitant murmur is due to blood flowing from a high pressure to a low pressure area, the ejection murmur is a result of the ventricle propelling blood through an outflow tract and/or semilunar valve which is smaller in caliber than the respective great artery. Such a murmur depends on both a size differential between the ventricular outflow areas and their respective arteries and on the amount of blood flowing through this area. The anatomic changes may be either a narrowing of the ventricular outflow tract (e.g., infundibular pulmonic stenosis), narrowing of the semilunar valve (e.g., valvular aortic stenosis), or widening of the great artery (e.g., aortic aneurysm). There is normally a slight difference in caliber between the ventricular outflow area and the artery; therefore, with high output states (e.g., thyrotoxicosis) or even with a normal cardiac output, "functional" murmurs may occur.

It is important to point out that the term "functional" only implies that there are no pathologic anatomic changes. They are not always innocuous or "innocent" since they may indeed represent an abnormal situation. The murmur of atrial septal defect with a left to right shunt is actually a functional murmur produced by the large flow of blood across the pulmonary outflow tract. Therefore, the term functional murmur is ambiguous and is frequently used incorrectly. "Innocent" is probably a better descriptive term for those murmurs occurring in people with no demonstrable abnormality.[4]

Aside from the "decrescendo" type regurgitant murmur and extravascular sounds, innocent murmurs, for the most part, fall into the category of ejection murmurs. These murmurs usually occur in children or young adults and are thought to originate from the flow of blood across the right ventricular outflow tract and pulmonic valve. The murmurs are usually heard best at the pulmonic area or along the left sternal border; however, they may be heard well at the apex. Recumbency is the best position in which to detect them. Since the murmurs are flow dependent, anything which increases cardiac output such as exercise or amyl nitrite will increase the intensity of the murmur.[8]

The origin of these sounds has been attributed to various variants of normal anatomy. Among these are slight displacement or distortion of the pulmonary artery or triangulation of the pulmonic valve.[9] The eponym "Still's murmur" refers to that type of innocent murmur which is heard best along the left sternal border and has a musical character to it. In adults an ejection murmur generated from the left side of the heart may be heard at the apex or aortic areas; however, one must be certain to rule out conditions such as systemic hypertension or a dilated aorta before labeling the murmur as innocent.

The incidence of innocent murmurs depends upon the age group considered, the acuity of the examiner, and the device used to detect the sounds.[10] Most authorities agree that in children and young adults, innocent "functional" murmurs are the most frequent, by far, of all murmurs. Some studies of children demonstrate that as many as 50% may show at one time or another an innocent murmur.[4]

The problem with these murmurs is being able to differentiate them from those resulting from a pathologic situation. In this respect innocent murmurs represent the most difficult subject in the entire domain of cardiovascular sound.[11,12] These murmurs confused Laennec so much that he finally came to the erroneous conclusion that no murmurs are of any value in the diagnosis of cardiac disease.[9] Messeloff concluded that there were no pathognomonic features that could distinguish a functional from an organic murmur.[13] However, there are some features to look for which are frequently helpful in differentiating the two entities.

First of all, the ejection murmur which is a result of anatomic obstruction is usually longer than the functional murmur since it takes more time to propel the blood past the obstruction. Therefore the inno-

cent murmur usually is short and almost never lasts throughout all of systole. Such factors as location of the murmur, effect of position and exercise already have been mentioned and are of value in identifying the hemodynamically insignificant murmur. Possibly that which is relied upon most for differentiation is the evaluation of other clinical information such as age, medical history, other physical findings, EKG, and x-ray studies. When this information is obtained and scrutinized and doubt still exists as to whether a pathologic condition is present, cardiac catheterization may be necessary.

Catheterization, as in the cases presented, will not necessarily identify the source of the murmur. Its primary function is to rule out the presence of any hemodynamically significant pathologic state, which information is actually that needed for managing the patient. Recent advances in cardiovascular surgery have made the differentiation of innocent and pathologic murmurs no longer of just academic interest. For example, the physical findings of an atrial septal defect are frequently difficult to distinguish from the "innocent" variety. A fixed split pulmonic second sound is usually mentioned as a distinguishing feature;[14] yet case No. 3 exhibited this finding as well (Figure 3).

On the other hand, the over diagnosis of heart disease is all too frequent. It is quite possible that patient No. 3 spent a year of her life in bed because of an innocent murmur. Thus the investigation of a "functional" murmur may not only be for detecting a potentially correctable condition but also for the definitive identification of innocent murmurs and the reassurance of patients that no hemodynamically significant abnormality exists. Cardiac catheterization may be the only method to accomplish this with any certainty.

It is a very pleasant task to be able to tell a worried young woman who has been told of a heart murmur that there is reliable information to indicate that the murmur is of no consequence and that she does not have "heart trouble."

Summary

Three patients with hemodynamically insignificant systolic murmurs are reported. Each patient had some electrocardiographic and/or x-ray finding to suspect some cardiovascular abnormality. The problem of evaluating systolic murmurs is discussed. Although the vast majority of these murmurs can be evaluated purely with the usual diagnostic procedures, a few patients may need cardiac catheterization to rule out a hemodynamically significant abnormality. A definitive diagnosis is often necessary not only for detecting potentially correctable abnormalities but also to reassure the patient with the "innocent" functional murmur that he does not have heart disease.

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Interrelationship of Digitalis and Potassium

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In 1918 Dr. Loewi showed that potassium abolished cardiac arrhythmias induced in animals by strophanthin.[1] Some years later Sampson,[2-4] Enselberg,[5] Lown,[6,7] and their co-workers showed that this cation is capable of suppressing arrhythmias in humans. On the basis of the above observations of the anti-arrhythmia action of K coupled with evidence of increased digitalis sensitivity in the presence of hypokalemia, a concept of specific potassium and digitalis antagonism developed. It soon became obvious, however, that the "antagonism" between the two drugs was applicable only in relation to arrhythmias.[10-12]

It is the purpose of this report to stress the hazards of indiscriminate use of potassium in normokalemic patients with digitalis intoxication.

Animal Studies

Experiments were performed on mongrel dogs weighing from 9-12 kilograms. The animals were anesthetized with 30 mg. of sodium pentobarbital per kilogram of body weight administered intraperitoneally. The entire experiment was monitored with an oscilloscope and, when advisable, permanent records were made using standard lead II connections.

The technic of administration of potassium and acetyl-strophanthidin (Lilly) was constant throughout all of the studies. Potassium was administered intravenously in the form of isotonic (155 mEq per L) solution of buffered potassium phosphate in distilled water. A calibrated flowmeter was used to insure a constant flow. The rate of injection of the salt varied between 1.10 to 1.23 mEq per minute, from experiment to experiment. Frequent plasma levels were determined using the Beckman flame photometer.

Ventricular arrhythmia was produced with acetyl-strophanthidin. An ampule containing 0.6 mg. of the drug was diluted in 9.0 cc of saline and administered intravenously at a rate of 1 cc every 30 seconds until A-V nodal tachycardia was induced. As a rule five to 10 minutes later, when the peak effect of the drug was manifest ventricular tachycardia was recorded.

Effect of potassium on acetyl-strophanthidin induced ventricular tachycardia. Ventricular tachycardia was induced in six animals with acetyl-strophanthidin. When the plasma K was raised from an average control level of 3.8 mEq per L (range 3.5 to 3.9) to an average of 6.4 mEq per L (range 5.9 to 6.9) the arrhythmia was abolished. However, within one-half to two minutes after the K was discontinued the ventricular tachycardia reappeared. The mean plasma level at that time was 5.5 with a range from 5.3 to 5.7 mEq per L (Figure 1).[14]

This study confirmed the fact that K is an excellent drug for the treatment of ven-

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Supported by the Herman C. Krannert Fund, the Indiana Heart Association, Indiana State Board of Health and the National Heart Institute (H.T.S. 5363, H-6308).

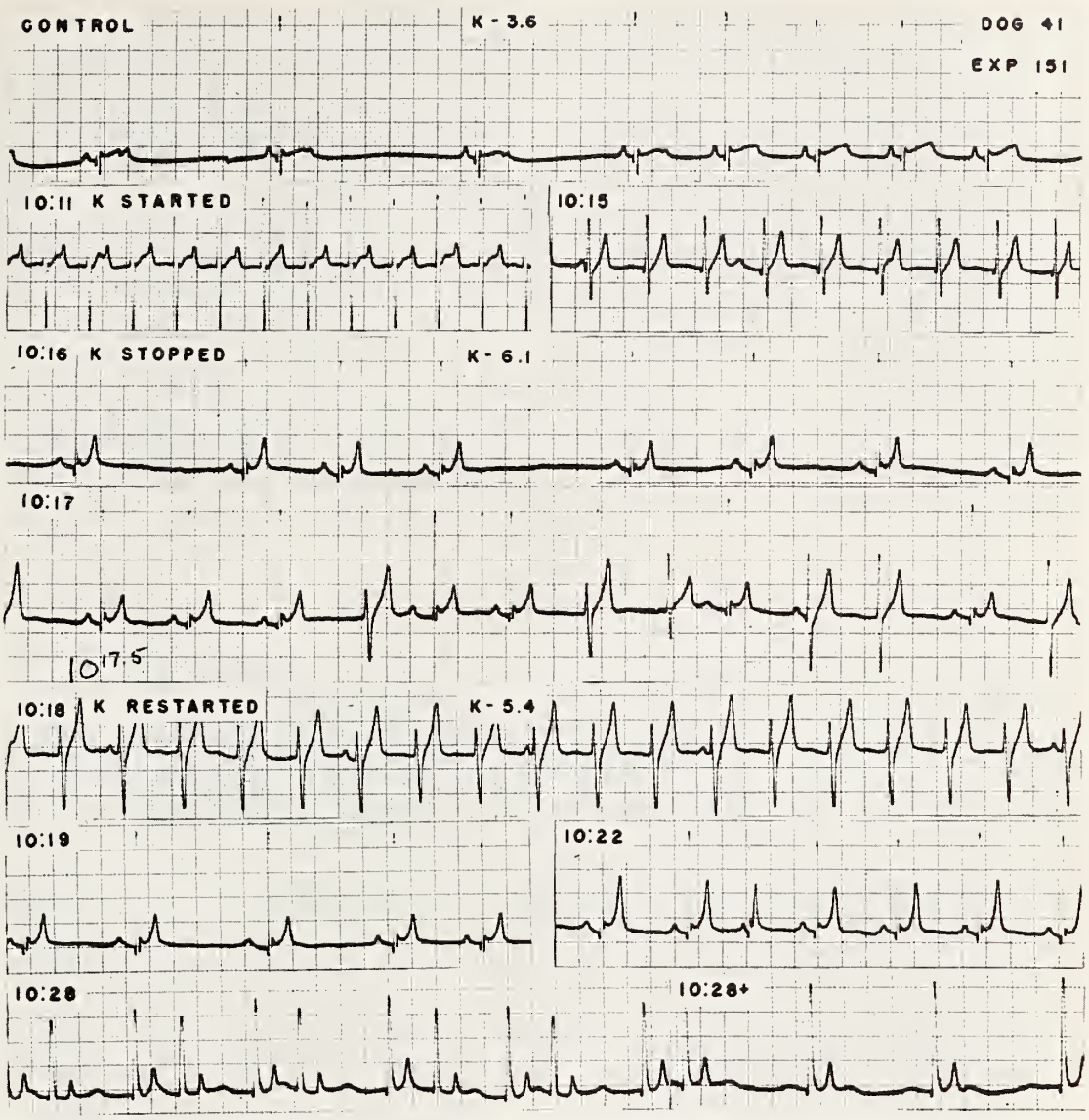


FIGURE 1

THIS FIGURE shows the transient effect of K an acetyl-strophanthidin (AS) induced arrhythmia. Cantrol strip shows sinus arrhythmia. The AS induced arrhythmia (10:11, 10:15 strips) is abolished when the plasma K is raised to 6.1 mEq per L (10:16 strip). Within 1 minute after the K infusion is stopped the arrhythmia reappeared (10:17, 10:18 strips) and is again promptly abolished by reinfusian of K (10:19, 10:22 strips). Continued administration af K produced first degree A-V block with A-V alternans due ta supernormal conductian (10:28 strip)[16] and secand degree A-V block (10:28 + strip).

tricular tachycardia. An interesting observation, however, was the rather transient nature of the depression of the arrhythmia. This transient effect, and the plasma levels at which the arrhythmia is depressed, correlated with our clinical observations described below.

Effect of potassium on atrioventricular and intraventricular conduction in the digitoxin intoxicated dog.

One of the constant manifestations of gradually raising plasma K in dogs is the appearance of first, second and third degree A-V block.[15, 16] Utilizing this endpoint, A-V block was induced in 42 nondigitalized dogs and in 12 dogs intoxicated with digitoxin.[17] The latter was accomplished intramuscularly with 0.33 to 0.50 mg. of digitoxin per kg of body weight, the dose never exceeding a total of 5.0 mg. Potassium was infused 48 hours after the digitoxin was given. It was found that an average of 16.6 mEq of K (range 8.2 to 26.3) was necessary to produce A-V block in the 42 control studies, but only an average of 7.2 mEq of K (range 4.5 to 12.7) was needed to produce the same degree of block in the 12 digitoxin intoxicated animals (Figure 2). In addition, the A-V block in the latter group occurred at a significantly lower plasma level. The average level for this group was 6.9 mEq per L as compared with a mean level of 8.5 mEq per L for the control experiments. The data

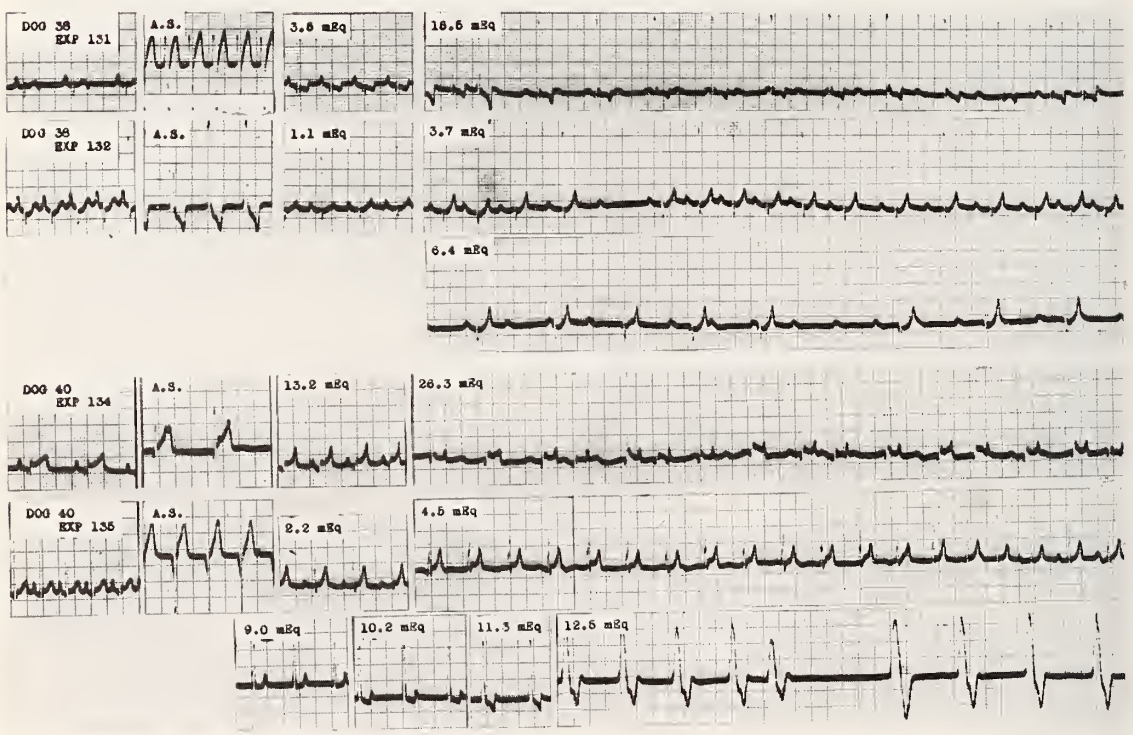


FIGURE 2

THIS EKG SHOWS the increased sensitivity of A-V and intraventricular conductian to K of digitalis intaxicated dogs.

Dog 38. Experiment 131 was conducted in a non-digitalized dog—16.5 mEq af K was needed to induce A-V block. After digitalizatian (experiment 132) only 3.7 to 6.4 mEq of the cation was needed to produce the A-V block.

Dog 40. Experiment 134 was conducted in a nan-digitalized dog. After 26.3 mEq of K was given an A-V block was recorded, but the duration of QRS remained normal. After administration af toxic doses of digitoxin A-V conduction disturbance was noted after 2.2 to 4.5 mEq, disappearance of P waves after 9.0 mEq, and significant widening after 10.2 mEq af K.

also indicated that in the digitoxin intoxicated dogs the rate of rise of plasma K was steeper than in the nondigitalized dogs.[11, 12] In a somewhat earlier study it was found that the lethal dose of K in the digitoxin intoxicated dogs was also greatly reduced.[18]

These particular studies indicate that K does not "antagonize" the effect of digitalis on A-V conduction but may actually enhance its blocking effect and that the intraventricular conduction is much more sensitive to the depressing effects of K when the animal is intoxicated with digitalis. A reasonable explanation for this increased sensitivity to K, the more rapid rise of plasma K and the lower plasma level of the cation necessary to produce A-V block seems to be (1) the block of entry of K into the cell coupled with (2) intracellular loss of the cation due to digitalis and the resultant (3) increase of the extra to intracellular ratio of potassium.

Clinical Observations

Effect of potassium on A-V conduction. Our interest in the problem of K and digitalis interrelationship was aroused by an observation that K given to "fully" digitalized individuals with atrial fibrillation increased the degree of A-V block.[10, 19] It was our feeling, at that time, that if K and digitalis had an opposite effect, then ad-

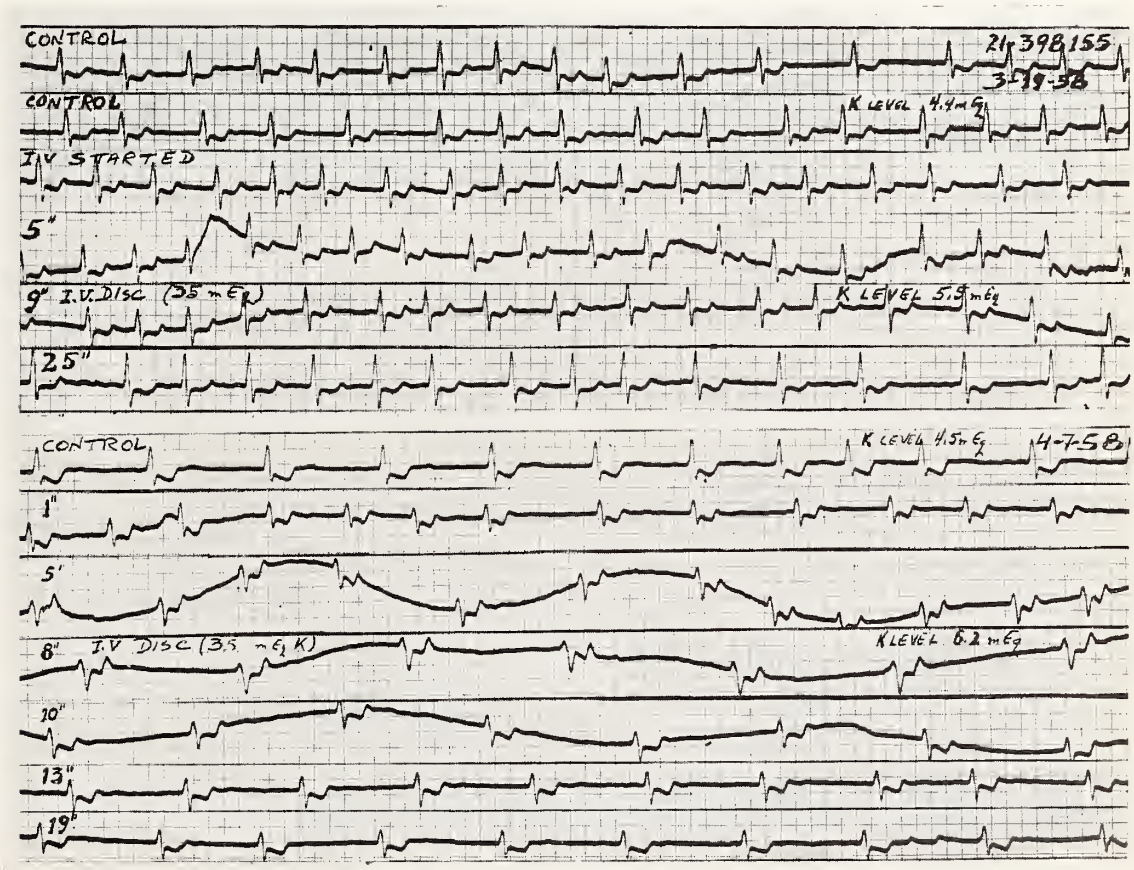


FIGURE 3

INCREASED SENSITIVITY of A-V conduction is shown in fully digitolized potients with atriol fibrillation. Administrotion of K to o patient with atriol fibrillotion on 3-19-58 foiled to produce any olteration of rate ar ventriculor octivotion (QRS). Following administrotion of odditionol digitolis, the ventriculor rate wos slowed (cantral, 4-7-58). Infusion of K ot this time produced o marked depression of A-V conduction and ventriculor activatian manifest by complete A-V block ond pralangation of the QRS respectively.

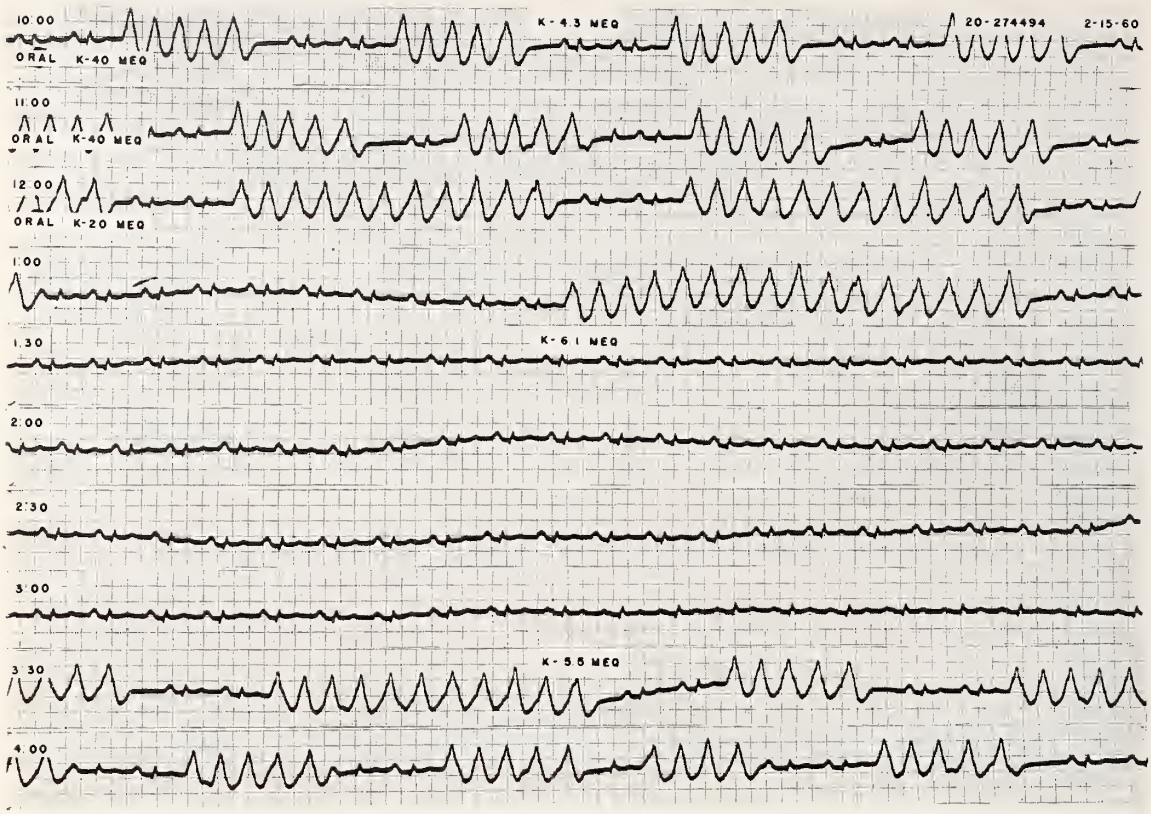


FIGURE 4

THE TRANSIENT effect of oral K on ventricular tachycardia accompanying digitalis therapy is shown.

Repetitive ventricular tachycardia was abolished with 100 mEq of Potassium Triplex (Lilly) given over a two hour period. At the time the arrhythmia was suppressed, the plasma level of K was 6.1 mEq per L. Approximately three hours after the last dose of K, the plasma level of the cation declined to 5.5 mEq and ventricular tachycardia reappeared.

ministration of K to individuals with atrial fibrillation with A-V nodal escape beats or A-V nodal rhythms should result in an increased A-V conduction with speeding of the ventricular rate and disappearance of A-V nodal escape beats and A-V nodal rhythms. Intravenous infusion of K to 17 patients resulted in a decided slowing of the ventricular rate in 13 of this group. This slowing was due to appearance of A-V nodal escape beats in four patients, A-V nodal rhythm in one patient, and progressive depression of the idioventricular pacemaker in two patients who originally exhibited complete A-V dissociation.[20]

Occasionally depression of A-V conduction appeared by K only after full digitalization (Figure 3).

Effect of potassium on the ventricular ectopic rhythms. It has been repeatedly pointed out by Lown[6, 7] that K is very effective for the control of atrial tachycardia with block due to digitalis intoxication. There is also very little doubt that K is a good anti-arrhythmia drug for control of ventricular ectopic rhythms.[1-5] In our experience, the effect of the drug, whether given orally or intravenously, for suppression of ventricular ectopic rhythms, is transient in nature and seems to be related to the rise of extracellular potassium (Figure 4). When K is given intravenously at a

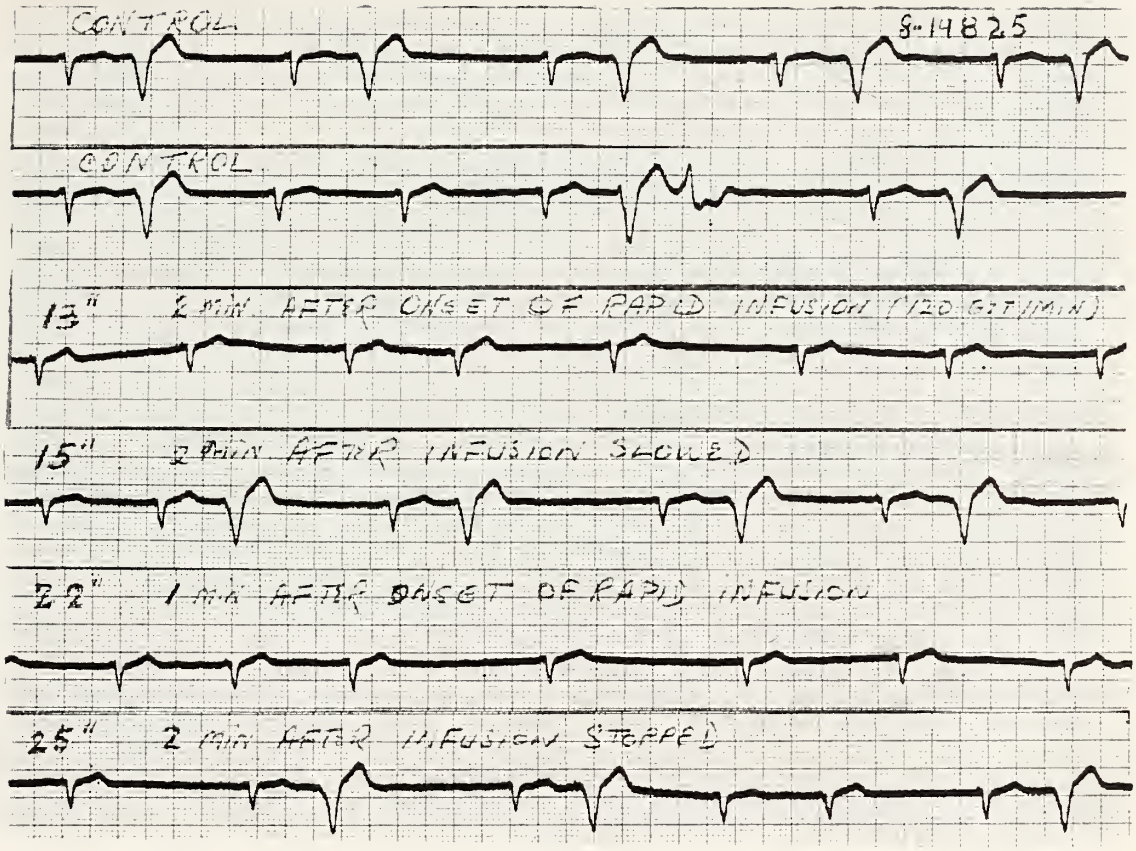


FIGURE 5

THE TRANSIENT NATURE of depression of ventricular ectopic beats with intravenous K is shown here.

Ventricular bigeminy (control) is abolished promptly by K (13 minute strip). At this time the infusion of K was slowed and within two minutes (15 minute strip) the arrhythmia returned, only to be abolished by rapid reinfusion of K (22 minute strip) and to reappear again two minutes after K was stopped (25 minute strip).

rapid rate (1.5 mEq/min) the presence or absence of premature beats can be controlled almost at will by changing the rate of infusion (Figure 5).

The dangers of indiscriminate intravenous use of K in digitalis intoxication was exemplified by an elderly patient who, in the course of our studies, was given a small amount (6.5 mEq) of K for the treatment of PAT with block and promptly developed transient cardiac arrest (Figure 6).

Discussion

Evidence based on clinical and laboratory studies indicates that:

1. K, when used for the treatment of arrhythmias due to digitalis, is an effective drug but the beneficial effect is often very transient.

2. Administration of K to digitalis intoxicated individuals with a *normal* plasma K may at times be dangerous and therefore should be given with great caution.

This is especially true in patients with heart failure[21] and/or renal impairment. Lown[22] and Somlyo[23] have recently expressed a similar attitude about the use of K in digitalis intoxicated patients. On the other hand there should be no hesitancy about replacing K in individuals with signs suggestive of digitalis intoxication with an accompanying hypokalemia.

Summary

The results of our studies of the interrelationship of potassium and digitalis are reviewed, and the possible dangers of in-

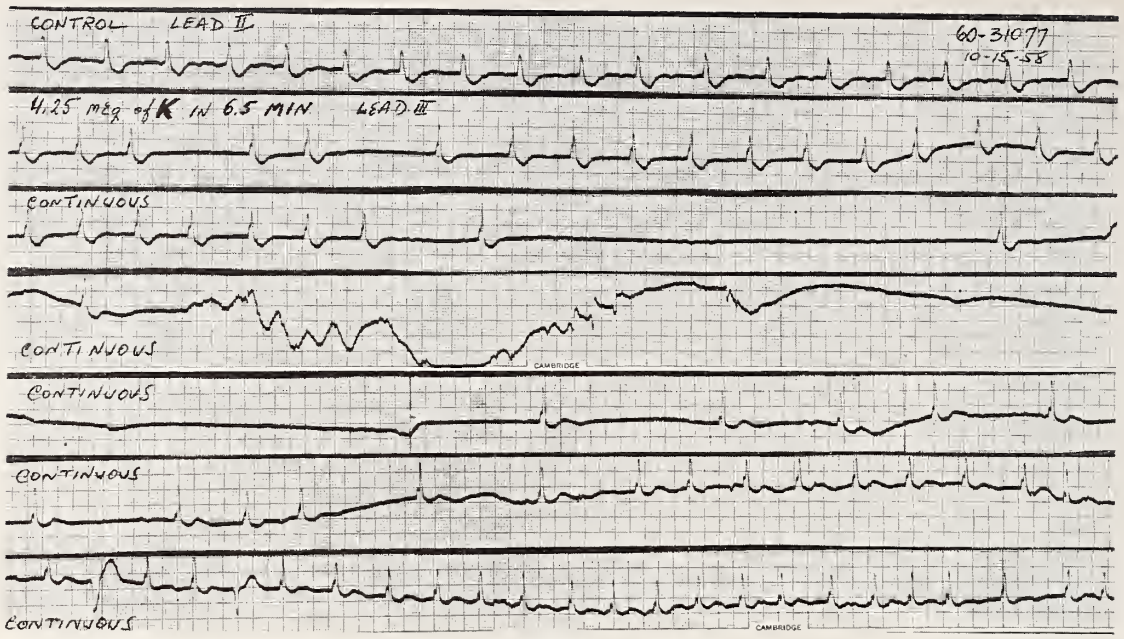


FIGURE 6

THIS FIGURE demonstrates the dongers of administration of K intravenously to digitolis intoxicoted patients. This patient wos given 4.25 mEq of K over a 6.5 minute interval for the treotment of PAT with block (control tracing). Although the amount administered was not large, cardiac stondstill wos induced, which fortunotely responded to pounding of the chest (bottom strip).

discriminate use of potassium in presence of digitalis intoxication stressed.

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Protection from Quackery

The elderly were major beneficiaries of the stepped-up drive to stamp out medical quackery and the sale of useless "health" products. This year, after seven years of litigation, the worthless arthritis remedy TriWonda was driven off the market by the Food and Drug Administration.

The FDA also took off the market seawater which was selling at $1.95 a pint when touted as a "chemical smorgasbord for ailing glands and organs." Altogether 145 misbranded drugs and 45 misbranded devices were seized by the Food and Drug Administration during 1962. It is estimated that consumers spend $1 billion a year on misbranded and worthless health products.

During the year, the Food and Drug Administration issued numerous warnings against the promoters of food fads and "cures" for chronic diseases whose wares are often bought by elderly people who can least afford them. Some use these products instead of getting the medical attention they need.—U. S. Department of Health, Education and Welfare, Special Staff on Aging.

X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and diagnosis of x-rays, edited by Erich K. Lang, M.D.

Retroperitoneal Air Study

*ERICH K. LANG, M.D.**
WILLIAM M. ANSHUTZ, M.D.†
Indianapolis

THIS 52-YEAR-OLD white male presented a clinical history suggestive of adrenal failure. An intravenous pyelogram revealed a significant tilt of the axis of the right kidney outward. A retroperitoneal air study was carried out and tomographic cuts of the right kidney area revealed a huge mass in the region of the right adrenal gland, measuring 4 x 3 cms. The surgicopathological specimen correlated well with the roentgenographic picture, and revealed a massive lymphomatous replacement of the right and left adrenal gland.

The diagnosis of retroperitoneal masses on roentgenograms has been difficult and disappointing. The presence or absence of a shadow caused by the psoas muscle margin on the plain roentgenograms is one of the signs used for the diagnosis of retroperitoneal masses. Deviation and tilt of the kidney axis demonstrated on intravenous pyelograms is particularly useful in the diagnosis of masses in the perirenal and suprarenal area. The deviation and splaying of the dye filled ureters shown on the drainage films of intravenous pyelograms may also reflect the presence of retroperitoneal masses. Lymphangiography may selectively demonstrate lymph node chains in the retroperitoneal space. This procedure is rather cumbersome however and only limited areas are amenable to demonstration by this method.

Retroperitoneal air or CO_2 insuffiation is



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† From the Radiology Department, Methodist Hospital, Indianapolis.

by far the superior method to demonstrate retroperitoneal masses on roentgenograms.

Technic

The patient is placed prone on a semierect tilt table. A needle is introduced into the presacral space under the guidance of the finger inserted into the rectum. The tip of the needle is advanced above the levator anus, delineating the ischio-rectal fossa towards superior. Nitrous oxide (1,500 ccs.) or carbon dioxide are then slowly introduced. An anesthesia machine offers an excellent source for CO_2 or nitrous oxide and its flow rate meters allow accurate calculation of the amount of gas that is introduced. An intravenous set polyethylene tube is readily available and may be utilized as a connection tube. The side of the patient on which one suspects a mass may be elevated to allow preferential dissection of the gas into the retroperitoneal region of this space. Roentgenograms should be obtained as soon as possible since the gas is readily absorbed. Laminograms of the area to be examined may render better detail and definition.

The excellence of the demonstration of retroperitoneal structures, the ease of introduction of the gas by this method, and the availability of all necessary equipment in any hospital is emphasized as an important advantage of this particular method. The use of CO_2 and nitrous oxide have excluded all known complications of gas or air embolism. ◄

Laboratory Medicine

Dr. A. Wendell Musser, currently serving in the United States Army at Fort Bragg, North Carolina, has regretfully found it necessary to discontinue his regular series "Laboratory Medicine" which has been appearing in *The Journal* for the past two years.

The Editor would like to take this opportunity to express his thanks to Dr. Musser for his excellent series and hopes that Dr. Musser will be able to resume the articles sometime in the future.

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Heart Disease Mortality Rate Soars

MAJOR CARDIOVASCULAR - RENAL disease, of which heart disease is the largest component, is becoming more and more the most important cause of death and disability in the United States.

Most of the apparent severity of the problem arises not from an actual increase in disease but from a very great *decrease* in all other causes of death since 1900.

The control of communicable diseases has contributed to a lowering of the general death rate from 1750 per 100,000 persons in 1900 to a rate of 750 in 1961. At the same time the decline in deaths due to cardiovascular-renal disease has been relatively small with a rate of 421.5 in 1900 down only to 380 in 1961. Cardiovascular-renal disease has thus risen in proportion to all deaths from one-fifth in 1900 to over one-half in 1961.

Heart and vascular disease has always been predominantly an accompaniment of old age, but as pointed out by the Health Information Foundation in its bi-monthly bulletin for November-December, 1962, the type of heart disease which has been controlled the most is the infectious type. Since this is usually a disease of younger people, heart disease in general is now even less an affliction of the young, and more and more associated with aging.

In addition to the successful treatment of large numbers of cases of rheumatic and syphilitic heart disease the surgical correction of congenital heart disease has further displaced the fatalities into the later years. Decline of mortality in the 1 to 14 age bracket has been 96% since 1900. Today the mortality from heart disease exceeds 40% of the total mortality in every age bracket above 55, and is almost 40% in the 45 to 54 bracket.

Heart disease has increased statistically, at least in part, due to better diagnosis and to a change in classification procedures. Deaths formerly charged to chronic nephritis and to vascular lesions of the brain are now known to be due basically to heart disease. And actually the statistics reflect more truly the importance of heart ailments as a public health problem today.

One of the best documented and least understood aspects of heart disease is the sex differential, and its rapid variation.

Sixty years ago the excess of male mortality was about 15%. At one time (1919-20) the differential was down to below five percent. Since then the gap has widened rapidly and in 1960 the excess male mortality was 88%.

No satisfactory explanation has been advanced to account for the excess male mortality from heart disease, nor for the fact that on the average women live about six years more than men. When this mystery is solved, it might well provide the basis for highly effective treatment.

In the course of time and if death due to accidental causes is eliminated, the relative number of deaths due to cardiovascular-renal disease will increase. And since everyone must die once, the object of heart research will be to postpone demise by heart failure to as old an age as possible.

Factors such as heredity, environment, hypertension, overweight and hypercholesteremia will receive the major attention, at least for the next few years. When the importance of these factors and the extent to which each factor may be influenced is better understood, heart disease will become a disease of older and older age.

Guest Editorials

Committee Reviews Polio Vaccine Record

THE SPECIAL ADVISORY Committee on Oral Poliomyelitis Vaccine met Dec. 18 to review all cases of suspect polio-like illness currently known to have been associated with the administration of all three types of oral polio-virus vaccine in non-epidemic areas. These included, in addition to cases previously considered, 25 cases newly discovered among persons fed vaccine and four cases among individuals in contact with vaccinated persons.

Some of the cases previously accepted as "compatible" have been dropped from this category because of additional clinical and laboratory evidence that has become available. New cases have been added to the "compatible" group where careful review has justified such action.

It should be emphasized that the committee does not consider that an individual case can be proved to be caused by the vaccine and no laboratory test has thus far provided a definitive answer. However, it has attempted to decide for each case whether or not it is "compatible" with the possibility of having been induced by the vaccine. Cases have been judged as "compatible" when three criteria were met: (1) onset within a period (4-30 days after feeding) consistent with a reasonable incubation period; (2) an illness clinically consistent with paralytic polio; and (3) laboratory findings which do not exclude a vaccine relationship.

On the basis of data now available, the total number of cases associated in time with the direct administration of Type III vaccine and considered by a committee majority as "compatible" is now 11, of which eight are over 30 years of age. Four cases were excluded as clearly unrelated to Type III vaccination; and seven cases were considered inconclusive as to a possible vaccine relationship.

The total number of cases associated with the administration of Type I vaccine, and considered as "compatible" is seven, of which four are over 30 years of age. Ten cases were excluded; six were considered inconclusive. None of the three Type II associated cases was judged to be "compatible."

It should be noted that the total number of doses of oral vaccine given in non-epidemic areas during 1962 is approximately 31 million Type I, 19 million Type II and 15 million Type III. Hence, the maximum potential risk for Types I and III is of the order of one per million or less overall, but higher for those over 30 years of age. For Type II there is still no indication of risk.

Consideration of the four cases in unvaccinated persons in household contact with vaccines resulted in two being judged "compatible" and two "excluded." One additional "compatible" case occurred in a non-household contact. Considering the large amount of vaccine administered and the

known frequency of vaccine virus spread from vaccinated to unvaccinated persons, particularly within homes, it is concluded that contact spread has posed no significant hazard.

It is therefore recommended: (1) that community plans for immunization be encouraged, using all three types, and (2) that immunization be emphasized for children in whom the danger of naturally occurring poliomyelitis is greatest and who serve as the natural source of poliomyelitis infection in the community. Because the need for immunization diminishes with advancing age and because potential risks of vaccine are believed by some to exist in adults, especially above the age of 30, vaccination should be used for adults only with the full recognition of its very small risk. Vaccination is especially recommended for those adults who are at higher risk of naturally occurring disease; for example, parents of young children, pregnant women, persons in epidemic situations and those planning foreign travel.

Of greatest importance is the planning of continuing vaccination programs to provide for the adequate immunization of the incoming generation.

(Report of the Special Advisory Committee on Oral Poliomyelitis Vaccine to the Surgeon General of the Public Health Service, Dec. 18, 1962.)

Paradox in Nursing

HENCEFORTH THE TITLE RN, must be based on a degree from an accredited university. So stated the American Nurses' Association at its 1962 convention in Detroit. This goal cannot help cause consternation in the already accredited nurse training schools throughout the country. Since the number of young people entering the nursing profession is still in short supply, this decision may well discourage many individuals from choosing nursing as a career.

The present system of attaining the status of an RN has been very satisfactory. For some it is a stepping-stone to further education in science or liberal arts. They then receive a baccalaureate or higher degree. The student nurse who for any reason is unable to complete the educational requirements for a degree can stop along the way and still have the status of an RN or LPN.

Most young women who enter nursing schools after high school feel they can see their way clear for three years of training to receive an RN. Why add two or three years to attain the same RN which many of their teachers had obtained in only three years? To be sure, college-degree nurses fill a distinct niche in the care of patients, especially in advanced technics, administration and teaching; but it is difficult to understand how an additional two years spent in college can make better nurses out of those who wish only to care for sick patients.

If the American Nurses' Association feels that the education of nurses is inadequate at the present time, let it recommend changes in the curriculum within the nursing schools. Let it not further deplete the reservoir of young women who aspire to the profession of nursing. It is an unfortunate paradox that the more highly trained and educated the nurse, the further removed she becomes from the bedside.

(Reprinted with permission from *The Massachusetts Physician*, Vol. XXI, No. 4, Dec., 1962.)

Editorial Notes . . .

The world's first nuclear reactor was operated originally on December 2, 1942 underneath the stands of the football field of Chicago University. Twenty years later there are more than 500 reactors in the world, devoted to research, testing, power generation and other special purposes. More than half the reactors are in the U. S.

Reactors for electric power are now being developed at an increasing rate. The most powerful single unit in the world is being built at Richland, Washington. It will be a breeding reactor—in addition to producing heat sufficient to generate 800,000 kilowatts of electricity, it will also produce plutonium. An even larger reactor is now being designed by the Atomic Energy Commission.

The Sears-Roebuck Foundation and the Student American Medical Association will continue the preceptorship program by which they enable medical students to spend two months with a doctor who is practicing in a medical building which has been constructed with help from the foundation. Each student receives a $500 scholarship and while he is working with his preceptor, the community furnishes his room and board. Ten such preceptorships will be available in the school year 1962-63. Jack Higgins of Indiana University School of Medicine participated in a preceptorship last year at Chetek, Wisconsin. He and other students praised their experience and stressed the practical value of the association with a practicing physician, as a part of their undergraduate education.

The Army has developed a portable x-ray unit, weighing only 57 pounds, which will operate on either 100 or 220 volts alternating current or on a silver-cadmium battery. The tube operates on a voltage of 120,000 and a current of 1.5 milliamperes supplied by a transformer which is built in the same container as the tube. When operated on the battery, the unit will take at least 165 radiographs without recharging.

The high cost of hospital construction and equipment can be amortized better by utilizing the expensive construction and the high-cost equipment to its full capacity most of the time. This means having several levels of care in each hospital and keeping patients at each level only so long as they have need for that particular care level, then moving them to a lesser care level as soon as possible. This produces considerable savings in personnel also. Dr. James Mackintosh of Bristol, England, is advocating that the British build hostels next to hospitals. The hostels would be little more than hotels but could shelter and care for many convalescing patients, as well as patients undergoing diagnostic procedures, and friends and relatives. The same proposals have been made in this country but with little actual accomplishment so far.

The mortality rate of holders of ordinary life insurance policies is remaining at a stable level of 6.1 per 1,000 persons. According to the Institute of Life Insurance, this is the same figure obtained last year and conforms to the general level of the past 14 years. The death rate averaged 7.5 during the 1930's, and 6.9 during the 1940's. At the present time about 55% of all deaths are due to heart and circulatory diseases. Cancer causes 19% and accidents six percent. Heart and circulatory diseases cause so many deaths because people are having their lives saved from other causes of death, the Institute explains.

Chief Justice Earl Warren is credited with the statement that the people of this country could use some "counselors in ethics." *Main Line Times* observes that there is no doubt that higher levels of ethical behavior are needed, but adds that the big problem is to persuade everyone to behave in accordance with the ethics which are already understood.

The AMA is starting a campaign to alert both physicians and the public to the advantages of raising the national level of immunity against smallpox. No emergency exists, but as pointed out in testimony before the AMA House of Delegates in Los Angeles, the immunity level is now so low that a few cases of smallpox might develop into epidemic proportions. Air travel makes it possible for a traveler to enter the country in an infectious stage and to expose many non-immune people before a diag-

nosis could be made. Everyone should be vaccinated at least once in five years and preferably every three years.

Cardiac arrest occurs much oftener during massive speed transfusions if the blood is cold. The JAMA (Jan. 5) reports 21 arrests in 36 patients receiving cold blood and only one arrest among 45 who received warm blood. If it is necessary to give blood hastily soon after removing it from the refrigerator, it should be warmed on the way in. A device to warm the blood as it is being given is described by the authors.

Polio incidence is down still farther and hepatitis is down after an upward trend in 1961. The first 49 weeks of 1962 recorded the lowest number of cases of polio for a similar period since records were first kept in 1915. The hepatitis count in the first 49 weeks showed almost 51,000 cases in 1962, a considerable improvement over the 69,000 reported in the same part of 1961.

The Atomic Energy Commission is now receiving written requests from news media for the accreditation of newsmen and press photographers for a trip into the underground cavity created one year ago by the underground nuclear explosion in a salt bed in New Mexico. The trip is considered reasonably safe, with a minimum of radiation and with only a slight possibility of encountering falling salt blocks. The air temperature in the cavity is 100 degrees, the humidity about 60%. ◄

Watch Those Disposable Syringes!

Disposable syringes are being found in trash receptacles and have been found in possession of drug addicts. The problem this creates for law enforcement officers is apparent. Addicts know that these items may be disposed of in trash receptacles without being destroyed and will go to considerable efforts to secure them after they have been discarded. The availability of these valued items to drug addicts defeats, to some extent, our hypodermic needle statute. It is urged that disposable syringes including the needle and barrel be destroyed after being used.

Destruction should include breaking the needle from the hub, breaking the nipple off the barrel and breaking the plunger, and wherever feasible, destruction of the remnants by burning.

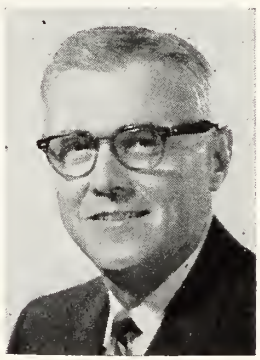
The cooperation of all persons and institutions in destroying disposable syringes (including the needle and barrel) will aid law enforcement by preventing these units from falling into the hands of persons who would misuse them, and will make an important contribution to control of the illicit use of narcotics.

Reprinted from *The Journal of the Medical Society of New Jersey*, August, 1962.

President's Page

By the time you read this, the 1963 session of the Indiana General Assembly will have been in deliberation for more than half of its 61 days. And, as usual, many bills have been introduced which to some degree, are vitally concerned with the medical profession and its allies in the health field.

In these matters most legislators of both the House and Senate appreciate and depend upon the viewpoint of the profession as expressed by members of the ISMA Commission on Legislation and its representatives.



But—most effective of all—is the contact of the legislators' individual physicians. Particularly is this true when controversy or strong divisions of opinion develop on a proposal.

Thus it is that all members of the Indiana State Medical Association should be ready to help when and if a call is received from the Commission on Legislation. In other words, there is no type of political activity which can surpass the "grass roots" sentiment expressed by folks "back home" where the legislator lives, works—and is elected.

All of us are busy, but we should never be too busy to take the time to perform civic duties—and this, it seems to me, is particularly true in areas where our viewpoints are not only appreciated but are necessary for the benefit of the health and welfare of all of the people.

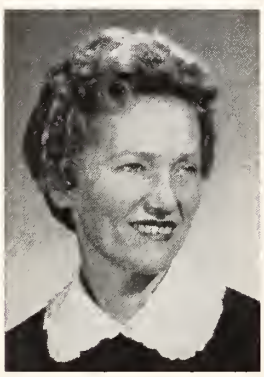
So—in the time remaining to the current session of the General Assembly—be sure to maintain a friendly relationship with your local senator and representative. And, if you receive an "SOS" from our Legislative Commission or headquarters office, please help to the best of your ability.

Maurice E. Stocke

The Woman's Auxiliary

REPORTS TO ISMA

The auxiliary is proud and happy to announce that Mrs. Frank Gastineau has been elected to membership on both the AMPAC and the I-HOPE Boards. I-HOPE, Indiana Health Organization for Political Education, was organized in August, 1960, and its membership is open to all doctors and wives in Indiana. The board is composed of 28 members, 22 representing the eleven Congressional districts (divided equally politically), five members at large, and one woman representing the doctors' family. Mrs. Gastineau becomes the first woman to serve on this board.



AMPAC is the American Medical Political Action Committee, organized in mid 1961, and the board is composed of ten members. The WA-AMA was formerly represented on this board by Mrs. Nancy Rowles of Kentucky.

Mrs. Gastineau has served the medical auxiliary for over 30 years. She is a charter member of Marion County and the Indiana auxiliaries, and has served these groups in many capacities, including president of both, Marion County in 1941-42, and two terms as president of the state organization, 1944-46. She was president of the woman's auxiliary to the AMA in 1959-60, and was a member of the board of directors for three years.

Ethel was the first chairman of AMEF when the auxiliary joined in the support of this project, and served in that capacity for five years. She was presented a trophy by the AMA for her outstanding work. The "Ethel Gastineau" trophy is now awarded annually to the state auxiliary most progressive in AMA-ERF contributions.

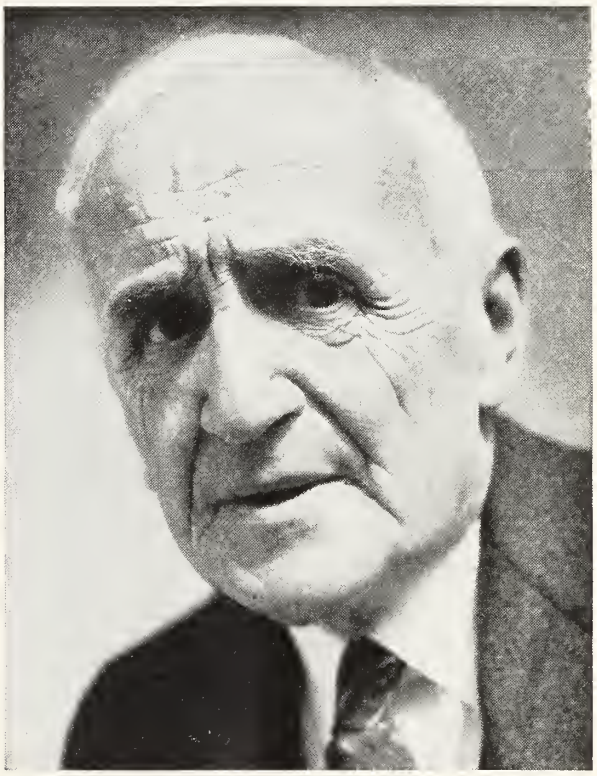
Ethel was also the first auxiliary member to serve as a liaison to the Indiana Chapter of WA-SAMA, the woman's auxiliary to the Student American Medical Association. She has also served as the national liaison.

A listing of all her offices and chairmanships would be too lengthy, but it can truthfully be said that no task has been too small or too large, too menial or too mighty for Ethel when she felt that Medicine needed her efforts.

The auxiliary is justly proud of Ethel Gastineau, and I am sure that the entire membership of the ISMA joins us in wishing for her the very best as she assumes her new responsibilities.

Mary Johnson





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Research in the Service of Medicine

Gleaned from the British Medical Journal

JACK W. HICKMAN, M.D.
Indianapolis

A comprehensive review of convulsions in children from television viewing is presented by Pantelakis, Bower, and Jones,[1] who report 14 cases of this condition which have been seen by them in the past two years. The authors comment that this condition is almost unknown in the United States in spite of the widespread use of television here. They speculate that this may be because our television has a higher flicker frequency and our screen picture is composed of more individual lines than the British picture. Having the child sit farther away from the set was helpful in reducing the number of convulsions. All attempts to decrease the number of hours per day of television viewing were poorly received, however. Barbiturates were also used, with success in therapy.

* * *

Three papers[2, 3, 4] and an editorial deal with very interesting work regarding the etiology of intussusception in children. Much speculation about etiology has been raised in the past and a great number of causes have been incriminated. In a series of 38 cases, infective viral agents were isolated from the feces of 80% of the patients. An adenovirus was isolated in 46% of the patients. Bell and Steyn were able to isolate 11 strains of virus from the lymph nodes of 17 patients with intussusception. These studies add support to the theory that a viral infection could cause lymphatic engorgement in the gut with resultant intussusception. Some feeding irregularities[2] were also noted, but the significance of this could not be assessed. It will be interesting to follow future work on the viral etiology of this puzzling condition.

* * *

Bonham and Gibbs[5] report on an enzyme test that may prove to be quite valuable in the diagnosis of gynecological carcinoma. They measured the 6-phosphogluconate dehydrogenose activity in the vaginal fluid of 139 patients. The value was elevated in 49 patients, and carcinoma of the female genital organs was present in 46 of these patients. The value was normal in 90 patients, and none of them had carcinoma. Therefore, with only three "false positives" in this series, this test looks promising. The test was also correct in patients with carcinoma-in-situ. The authors believe that a test of this type may be of more practical value than cytodiagnosis as a screening procedure since it is technically easier to run and to obtain satisfactory specimens. It also may be more accurate in cases of uterine corpus carcinoma and carcinoma-in-situ.

* * *

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SENATOR CARL T. CURTIS
Minden, Nebraska

THIS IS THE Thanksgiving season. We should always be thankful to our Creator for the many, many blessings which are ours. It is fitting and proper here in the United States to have a period set aside each year for thanksgiving. We should be grateful for so many things that it would take volumes to enumerate them. We are the recipients of eternal spiritual blessings, as well as material blessings.

I am sure I speak for all present when I express gratitude for the basic freedom we enjoy in the United States. In spite of all of our problems and the turmoil of the times, the United States is still the greatest country on earth. Here we have a degree of individual liberty, enjoyed no place else on earth, a liberty for which millions throughout the world long today.

The basis of personal liberty or freedom is the right of choice. Americans have the right to choose where and how they shall worship. Americans can still choose their own occupations. Our citizens can decide where they want to live. They can move about from place to place without censorship or hindrance from government. We enjoy the right to contract and the right to associate. We have the opportunity to participate in free elections and we can petition our government. Whenever any of these rights or liberties are impaired, all are impaired. Therefore, the right of choice in matters relating to medicine is truly a part of the American way.

Motivation Brings Progress

Our republic is a capitalistic nation. Here we have private ownership of property. Here we have the profit motive which has spurred men on in the individual and total development of our economy.

The right of Americans to think, to study, to develop, to work, to build and to accomplish has caused them to make the most of their talents.

Under a socialistic system, men work not for profit, nor the hope of a profit—they work from compulsion. Is it any wonder that socialism has failed whenever and wherever it has been tried? Private enterprise is the American way. Private enterprise is liberty's way. When men work because of compulsion there is no liberty.

Individual initiative, private ownership of property and the desire for a profit have built for America an economy that is envied around the world. In two great wars in our lifetime, our American system has been able to produce the leadership, the machines, the food, the medicines, the implements of war and the financing to save civilization. The American system has been a success.

Public Education Essential

The American people will never deliberately, in one great step, choose socialism. The danger is that little by little we are tempted with programs that must and will ultimately lead to socialism. Such is the case in reference to medical care.

The government controls, the loss of liberty and the deterioration of medical care are only slight at the beginning, but they grow and grow.

We are at this time faced with a real fight to preserve the private practice of medicine in the United States, to prevent those steps from being taken which will ultimately and finally lead to a government system of medicine. I believe we can win that fight. I believe we can win it in 1963,

* Speech given before the fifth annual Medical Services Conference of the American Medical Association, Los Angeles, Calif., Nov. 25, 1962.

but there was never a time when we needed to work harder and when there was a greater need for public education in all that is really involved than now.

I am for hospital and medical care for our aged citizens. I want that care to be the best that our fine, traditional American system of medicine can provide. I want the great advances made in medicine and in drugs to continue for the benefit of all mankind. The record in this country is unsurpassed.

I do disagree with some individuals as to how we should provide this medical care for our citizens over 65. Without boring you with statistics, I believe you will agree that among those over 65 there are some people well able to pay for their own hospital and medical care or to secure private insurance to provide same. There are also some older people who are unable to provide hospital and medical care for themselves. Let us consider each group.

The first question is: Should government provide medical care, including hospital care, for our older citizens who are unable to provide for such care themselves? I would answer that question with an emphatic yes. For many years our destitute aged have received hospital and medical care at public expense. That should be continued. I would go further. I would include those people over 65 who may have some funds and are self-supporting, but who cannot pay a costly hospital and medical bill. This group has sometimes been referred to as the "near-needy."

Such a program, to provide hospital and medical care for the "near-needy," including drugs and other essentials for sick patients, has been enacted. It is known as the Kerr-Mills law. I voted for it. Under this law, any state desiring to provide medical assistance for people over 65, who are "near-needy," can do so and the Federal government will share in the cost. It follows the same pattern that has been followed for the actual needy for many years. The "near-needy" are not required to be paupers in order to be entitled to the benefits.

Under the Kerr-Mills law a program can be set up to fit the specific needs of a patient. If he needs help in having medical prescriptions filled, it can be done. If he must be sent to the hospital, it can be taken care of. Government can pay the costs of having the doctor call at his home or surgery can be provided. In fact, the Kerr-Mills law is not limited to fine print benefits. It is intended to take care of people over 65 who need help and who are and should be the concern of government.

Young Must Pay for Aged Care

The other basic question to be asked is: Shall government provide hospital and medical care for people over 65 if they are well able to provide it for themselves? This is a fundamental question. It means, should we tax the young, the middle-aged, and the aged if they are still working, to pay the hospital bills and some related medical expenses for all older people, including those who are well able to pay for it themselves? My answer to that question is, no. I do not believe, for instance, the government should tax young people who are raising a family, buying a home, and educating their children to pay the hospital bills of individuals who are financially able to pay their own bills. This is the essence of the Kennedy Administration's proposal. It is the King-Anderson proposal.

If the King-Anderson bill is enacted it will mean a man can have an annual income of a hundred thousand dollars or more, unlimited capital assets, need not be retired, yet if he is 65, his hospital bill and certain related medical expenses will be paid. By whom will it be paid? It will be paid by the workers and the self-employed and the employers of the country.

I am opposed to the Kennedy proposal for several reasons:

(1) The proposal would provide hospital care for all elderly citizens without considering whether they could afford to pay their own hospital expenses.

(2) The proposal would finance such a program through the Social Security system, thus overburdening the present system.

(3) The proposal would increase withholding taxes, primarily on the young, making it more difficult for them to meet their

current medical expenses, much less provide for future expenses.

(4) The enactment of the Kennedy proposal, that is, the King-Anderson bill, would result in a poorer quality of medical service for all of our citizens.

In citing established facts and figures in support of my position, I want to give credit to certain of my colleagues. Congressman Tom Curtis of Missouri has been a leader in research on the subject of hospital and medical care for the aged and I want to pay tribute to him. Likewise, I compliment Congresswoman Griffiths of Michigan for the facts she has assembled.

What Bill Does Not Do

Let us consider just what the administration's proposal would do for those people over 65. It would pay for hospital services up to 90 days and certain nursing home services up to 180 days, plus additional home health services and out-patient diagnostic services, or, as Congresswoman Griffiths says, "This program adds up to the payment of the costs of hospital care and economical substitutes for hospital care."

The King-Anderson bill would not pay for most doctor bills incurred in the hospital.

The King-Anderson bill would not pay for calls at the doctor's office.

The King-Anderson bill would not pay for doctor calls at the home.

The King-Anderson bill would not pay for surgery.

The King-Anderson bill would not pay for prescriptions, medicines, or drugs of any kind, except as an incident to the hospitalization.

This administration bill would not provide any benefits for people confined to a mental or tuberculosis hospital.

The estimated cost of the first year of operation is a billion dollars. It is based upon the premise that government should tax all of our people to pay hospital bills and some related medical bills of individuals—some of whom are much more able to pay those bills than the people paying the taxes.

A study has been made as to what portion of the costs of illness would be paid if the King-Anderson bill, sponsored by the Kennedy Administration, were enacted into law. This has been established as being 25% of the expenses of illness of persons eligible for the benefits. In other words, for the people covered, whether they are in need or not, it would not pay 75% of the expenses incurred.

My colleague, Tom Curtis, has very aptly pointed out "that a medically indigent person is no more able to pay 75% of his medical expenses than he is to pay 100% of such expenses."

Unfortunately, the issue of medical and hospital care for the aged has been confused by a lot of misinformation. I am satisfied that many of the proponents of the measure in Congress do not realize its shortcomings. I am thoroughly satisfied that many of the people back home have been misinformed. It is not uncommon for a constituent to write in support of the administration's proposal citing, as a reason for its need, the high cost of his doctor bills and his medicine. The fact is, the proposal being offered would not pay any part of either one.

Does Not Cover Extended Illness

When the King-Anderson bill was considered by the Senate this last year, it was shocking to notice that some of my colleagues had a total misunderstanding of the bill before us. Senators arose in their places and told of someone that they knew who had suffered a catastrophic illness. They recounted for the record not an illness of a short duration but a long one, involving prolonged hospitalization and costly surgery, nurses' care and medical attention. They appeared not to realize that the bill before them would do practically nothing for the individual or the family faced with a prolonged, catastrophic and expensive illness.

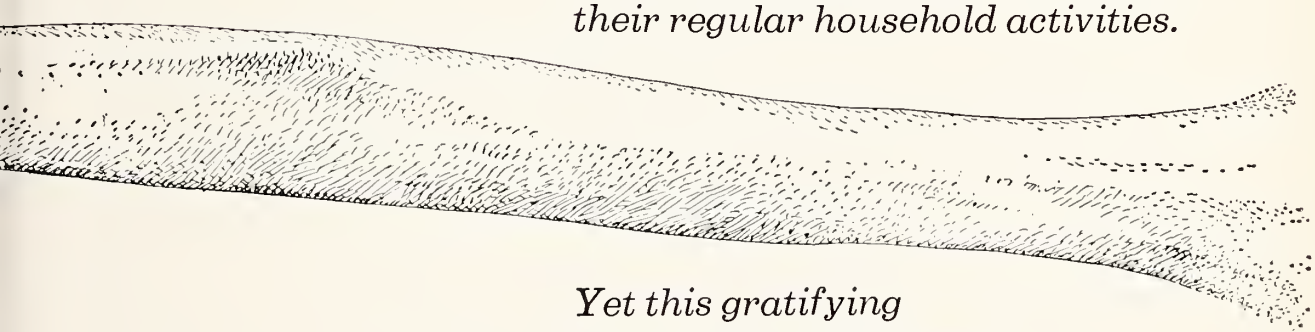
Either the administration proposal is a delusion and will be a disappointment to our people, or they must admit it is merely a foot in the door for a larger program.

While many of the public received misinformation about what the bill would do, the designers of the legislation knew well it was only a beginning and that they intended to inaugurate a complete program of govern-

Continued on page 218

painful joints

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Continued

ment medicine. I want to read to you what a distinguished Senator said on the Senate floor during that debate. He said:

> "If the Senator from Wyoming will permit me to do so, I wish to comment on the two points the able Senator from Louisiana raised. One was that if the program of insurance, hospitalization, and medical care were enacted, those of us who support it should take the responsibility of considering it as only a beginning. I am pleased to accept that responsibility."

It is well to keep in mind that the advocates of big government, the people who do not believe in the ability of most of our citizens to take care of themselves, and who now favor the administration's proposal, were, a few years ago, proponents of the Murray-Wagner-Dingell bill, which did provide complete governmental medical care for all of our citizens.

The issue before us is not merely one legislative proposal or bill, it is the choosing of the road to socialism.

The administration proposal disregards the great advances that have been made in private health insurance. As of December 31, 1961, 73½% of our civilian population was covered with some form of health insurance. Fifty-five percent of the aged population have some kind of private health insurance. The Department of Health, Education and Welfare has estimated that by 1965, 70% of the aged will have some private health insurance.

The problem of medical and hospital care for the aged can best be met through existing law, including the Kerr-Mills bill, which takes care of the "near-needy," and through the channels of private insurance. Let us not forget that the government has failed in every business operation it has started.

Congressional Rule

The enactment of the Kennedy proposal means government medicine. If government funds are spent to provide hospital and related medical care, the Congress must give directions as to how that money will be spent. There will be rules and regulations. There will be contracts with hospitals and doctors. I am not unaware that some of its proponents deny it is socialized medicine. When it comes to socialism, I would say that the Socialist Party of America could qualify as an expert on that subject and the party itself has termed it socialized medicine.

As I previously stated, the enactment of the Kennedy proposal now before Congress will mean a poorer quality of medical service not only for our aged, but for all of our citizens. History is on our side in this argument.

Every country of Europe has some sort of government medicine. Let's see what has happened. Europe no longer leads the world in medical science, yet 30 years ago medical students from this country and from all over the world traveled to Europe for advanced medical education. They no longer go to Europe, they come to the United

Continued

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2. Spoor, H. J.: N.Y. State J.M. 58:3292, 1958.
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AMERICAN WAY

Continued

States because our private practice of medicine means better medical education and better medical care.

When Great Britain adopted their program of government medicine in 1947, they had one doctor for 877 people. Britain's government medicine caused such a deterioration in the practice of medicine that ten years later they had one doctor for every 1,149 people. Here in the United States, in spite of our population explosion, the ratio of physician to patient remains steady, about one for every 750 people.

Before the United States embarks upon any program that costs a billion dollars the first year, let us brush away all emotion and prejudice and look at the facts. I am convinced that a careful gathering and study of the facts will show the King-Anderson proposal to be unwise and not in the best interest of our citizens, either those over 65 or those under 65.

If it is heresy to say I believe in the competence, the integrity and the skill of my family doctor, my family druggist, my dentist and my insurance agent, let it be heresy. I want our system to continue to make advances in saving lives, relieving pain and suffering, and adding to the length of life in the future as it has in the past.

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The second of three papers to be published on voluntary health insurance. They were presented at the Indiana Academy of General Practice "Insurance Day," Sept. 9, 1962.

The Future of Voluntary Health Insurance

CARL R. ASHMAN*
Fort Wayne, Indiana

YOU SHOULD NOT assume that my appearance on this platform automatically classifies me as an expert on voluntary health insurance, even though I have had some years of exposure to it. On the contrary, a consciousness of my own limitations makes me somewhat hesitant to participate in a discussion of such a formidable subject before such an intelligent and informed audience.

Hazards of Prophecy

It is always hazardous to don the robes of a prophet. This is particularly true with respect to something as dynamic and volatile as health insurance has proven itself to be. How hazardous can be documented by one or two examples.

In 1938, the National Health Conference concluded that "Voluntary sickness insurance without subsidy or other encouragement through official action has nowhere shown the possibility of reaching more than a small fraction of those who need its protection. . . . The Technical Committee on Medical Care cannot find the answer to the nation's problem in voluntary insurance efforts." At that time only about eight percent of the population had some form of health insurance coverage.

Ten years later when that percentage had grown to 42—or more than five-fold—an erstwhile eminent Hoosier, Oscar Ewing, then Federal Security Administrator, reported that "at a maximum, only about half of the families in the United States can afford even a moderately comprehensive health insurance plan on a voluntary basis."

It is also comforting to note that more than ten years ago others, including some supposedly knowledgeable insurance officials, were predicting that by this time the government would be monopolizing the health insurance field.

To avoid the risk of becoming just one more discredited soothsayer, I am sorely tempted to confine myself to the reasonably safe statement that the future of voluntary health insurance lies ahead of us. However, there have been and are now operating certain more or less discernible trends which, in my judgment, should give us some indication of the shape of things to come.

In any event, I am consoled by the knowledge that if I project my forecasts enough years into the future, I won't be around to be embarrassed if and when my prognostications are refuted. That is one of the advantages of being a senior citizen.

Growth of Health Insurance

As I have indicated, the spectacular growth of voluntary health insurance, particularly in recent years, has confounded even the experts. (Incidentally, the figures which I have, and I promise not to inflict too many of them upon you, are for all types of insurers, including, in addition to the commercial carriers, Blue Cross-Blue Shield and medical society plans, industrial, community and college health plans, and private group clinics.)

At the end of 1961, it is estimated that 135 million—a figure approaching 75% of our total population—were protected to a greater or lesser degree, by hospital expense insurance—both group and individual. Just ten years ago, or at the end of 1951, the corresponding number was 85 million and 20 years ago the number was only 16 million.

In the area of surgical expense insur-

* Second Vice-President, the Lincoln National Life Insurance Company.

ance, the number has increased from less than seven million at the end of 1941, to 65 million at the end of 1951, and to 125 million at the end of 1961. For regular medical expense—which in the main represents the cost of doctors' treatments for non-surgical care in the hospital, home and office—the corresponding figures are respectively 3, 28 and 93 million.

Major medical insurance has, as is natural by reason of its comparatively recent origin, shown the most dramatic growth of all. Not even in existence as late as 15 years ago, there were at the end of 1961 more than 34 million protected by this form of coverage, an increase of 6.7 million, or over 24%, in just one year. Just the other day I read that more than 60% of all group health programs inaugurated in 1961 involved this type of protection.

In terms of dollars and cents, the figures are even more striking. To illustrate, benefit payments increased 338% from 1950 to 1960 as contrasted with a 72% increase in the number of insured persons, and there was a further increase of more than 11% from 1960 to 1961, reaching in the latter year an aggregate of 6.3 billion dollars. This, in my slightly prejudiced opinion, is a rather impressive number of dollars. And yet we are told we are doing an inadequate job because such payments represent only about 25% of the nation's total personal medical expenditures—a rather general and vague term, which includes many medical costs inconsequential to the individual or family, non-medically dictated, optional or luxurious in nature, or which can scarcely be considered medical care at all—such as the not inconsequential aggregate outlay for certain nostrums which, I understand, are more distinguished for their alcoholic content than for their curative properties.

To further invalidate the criticism it includes, for example, the medical expenditure of those persons—substantial in number—who are well able and prefer to pay their own bills without employment of the insurance mechanism. When we relate benefit payments to covered medical expenses of insured persons an entirely different and much more valid picture emerges.

What the Future Holds

So much for the past and present. What do these figures portend for the future? Well, barring a complete take-over by government (and I shudder at even the thought of such a possibility) the increase in our population, which is expected to reach 212 million by 1970 and 300 million by the year 2000, should be accompanied by a substantial increase in the numbers insured, as well as in aggregate benefit payments.

We can, however, probably expect some slowing up in the percentage rate of growth, especially in the so-called basic or conventional coverages, as we approach the saturation point. The saturation point is, of course, something less than 100% as there will always be substantial numbers of our citizens who do not want or do not need or who cannot afford our product.

In the area of major medical insurance, however, despite the impressive strides which it has already made, the consensus is that the surface has scarcely been scratched. Aside, therefore, from the normal growth generated by population increases, we may expect still larger increases both in number and percentages, as people become educated away from the debatable need for first dollar coverage to the definite need for so-called catastrophic coverage. This, of course, will not happen overnight but the process will, I should think, be greatly accelerated by economic pressures—just as most of us nowadays must, for cost considerations, content ourselves with deductible automobile collision insurance.

Medical Care for the Aged

What about medical care for the aged? Heartened and encouraged but far from rendered complacent by recent political developments in Washington which President Kennedy has described as a defeat for every American family, but which some of us are disposed to regard as a major victory, the immediate future is certain to witness a concentration and intensification of effort on the part of all insurers in extending medical care to our senior citizens.

As far as the commercial carriers are concerned, although there are several hundred companies which currently offer in-

dividual health insurance policies to older people, there are only a comparatively few companies offering contracts designed specifically for them and geared to their particular needs and circumstances, and are making an all-out effort to enroll senior citizens in substantial numbers. We may anticipate, I believe, a material increase in the number of such companies.

In a number of states the domestic carriers are pooling their efforts to extend comprehensive medical care to their older citizens on what is virtually a nonprofit basis. Such a plan has been in operation in Connecticut for more than a year and similar plans have recently gotten under way in New York and Massachusetts. Out-of-state companies who meet certain qualifications are eligible to participate in such plans, and my own company is participating in Connecticut and Massachusetts.

Actually, as you all know, these people are not nearly as badly off as some slightly less than disinterested observers would have us believe. Currently, about 53% of them have health insurance protection and it is estimated that by 1969 that percentage will increase to 75. How much higher that percentage can or should go is debatable. After all, the mere circumstance of old age does not necessarily dictate a need for health insurance.

For example, I am fairly sure that the President's father has had no difficulty in meeting the hospital and medical bills occasioned by his recent illness. And, even if he had been entirely destitute, I am just as sure that he would have been taken care of, not because he happened to be the President's father but because I seriously question whether there are many instances of persons in any age bracket being deprived of such care, because of inability to pay, if they actually need and seek it.

It is not debatable, however, that our voluntary system now has a breathing spell and a renewed opportunity to demonstrate its ability to solve the problem. I am confident all of us will take full advantage of that opportunity.

Changing Benefit Patterns

Another development we may anticipate is a change in benefit provisions and patterns to the end that our product may be more responsive to modern medical practice. As our friendly critics do not hesitate to point out to us—and there is merit to their contention—our policies too often encourage unnecessary hospitalization and fail to recognize that adequate medical treatment can often be rendered at least as effectively and certainly more economically outside the hospital.

Major medical insurance, to which I have already referred, is a giant step in that direction but much remains to be done. A few of the areas in which we may look for a great deal of activity are (a) intensive care, (b) payment for confinement in convalescent and nursing homes which meet certain standards, (c) organized home care programs, (d) dental treatment and (e) vision care. Already a few cautious steps have been taken at some of these points.

Liaison with Providers of Medical Care

We, in the insurance business, have long been aware that the success or failure of voluntary health insurance rests in large measure upon the sympathetic understanding and the consequent full and active cooperation of the medical profession and other providers of medical care.

To that end, more than 15 years ago we formed an organization known as the Health Insurance Council to seek out and provide the necessary channels of communication. Within recent years, state and local committees have been established to reach hospitals and doctors at the local level. On the other side of the coin, grievance committees, hospital review committees, etc., are making an invaluable contribution to the solution of our common problems.

These activities will, of necessity, continue and be expanded in the years ahead as all of us come to a fuller recognition of the community of interests involved in ensuring that the most efficient and effective use be made of the funds available for health insurance protection, consistent and commen-

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surate with adequacy of care. The attainment of that goal demands and will, I am sure, engage the best efforts of all of us.

Our Problems

It would be less than honest for me to contend that our relationships with the medical profession are all "sweetness and light." Fortunately, our—shall I say—differences of opinion are comparatively rare and can almost always be resolved in friendly fashion when all the facts are known.

To be completely frank with you, however, there are occasions when neither we nor our medical staff can find any justification for the size of the bills presented and we cannot but conclude that the existence of insurance has been a determining factor. Please do not misunderstand us when, in such instances, we raise our voices in protest. We are not attempting to tell anyone what they should charge for their services —that is neither our intention nor our prerogative—but, in fairness to our policyholders who ultimately must pay the freight, we feel we cannot remain silent when our liability and our consequent claim costs are affected thereby.

Your Problems

By the same token you occasionally become annoyed with some of the things we do. One of your annoyances, we know, is this matter of overinsurance. Certainly it is rather inconsistent for us to expect your profession to ignore the existence of insurance in fixing your charges and, at the same time, make it possible for your patients to make a profit on their insurance through the issuance of duplicate benefits.

Our industry is fully conscious of and is giving very close attention to this problem and, while its ramifications and complexities are many and varied, I am hopeful that eventually a reasonable solution may be found.

We know, too, that many of you feel put upon by the amount of paper work we ask you and your office staffs to perform. Believe me when I tell you that the insurance companies—individually and in combination—are bending every effort to reduce and simplify that work to the end that we will ask for no more information than is necessary for proper claim administration, that is, the prompt payment of the right amount of money to the right people.

Costs

It is no secret that over the years health insurance costs have increased tremendously. It is also no secret that, despite occasional propaganda to the contrary, we—the insurers—have had a hard time keeping our heads above water. These increases in cost are primarily due to inflation and the development of new but necessarily expensive medical technics—jet age medicine, as our great and good friend, Dr. Annis, describes it.

Another contributing factor, although its extent and effect are hard to measure, is overutilization (or abuse) of medical services and facilities, including, among other things, unnecessary or unduly prolonged hospital confinements and the rendering of services and treatments beyond those required for the adequate care of the patient but which are encouraged by the availability of insurance.

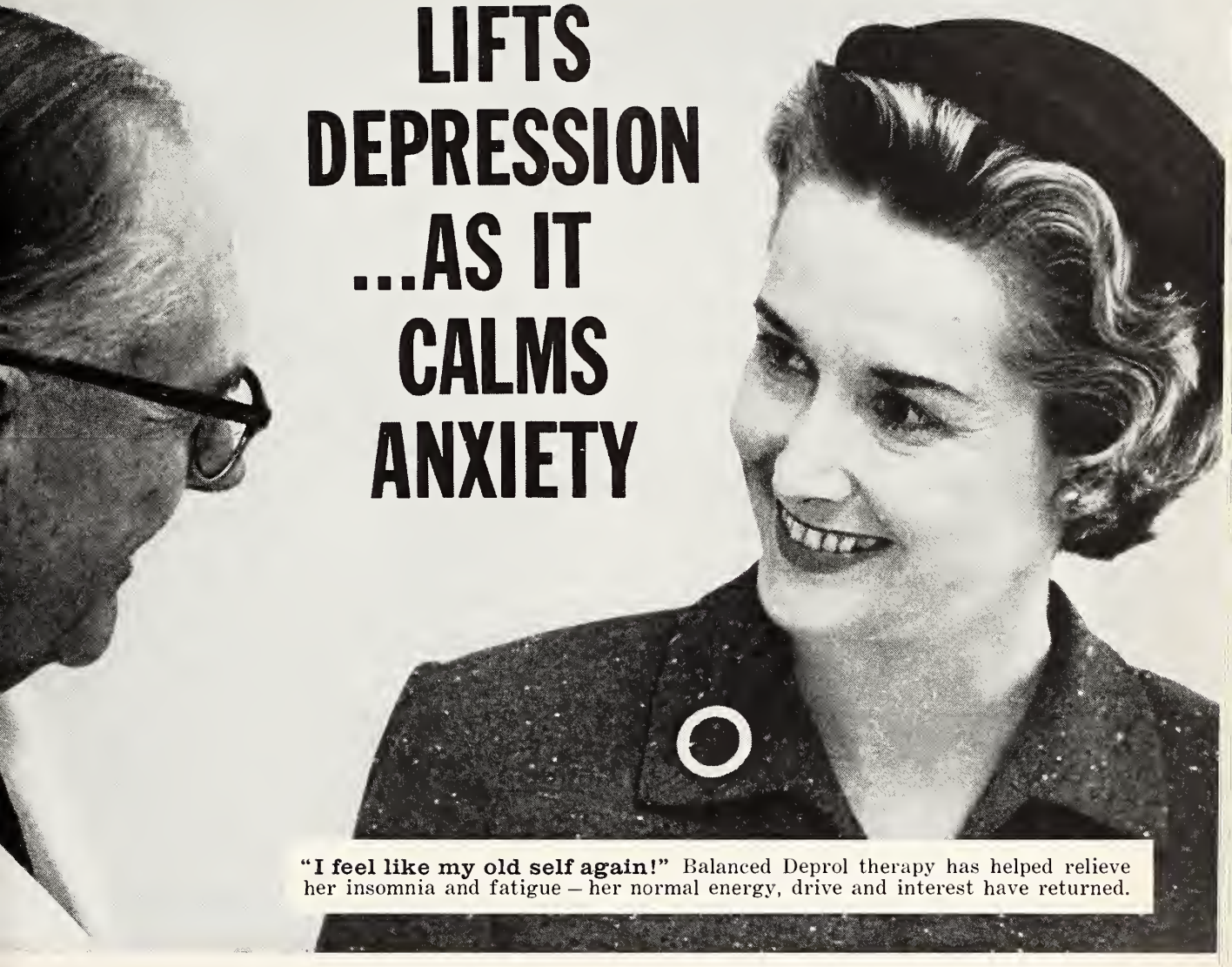
Now no one would, I think, be rash enough to predict that inflation has run its full course and that overutilization can be completely eliminated, nor does anyone expect or even hope that medical research and progress is at the end of its rope. So it follows as almost inevitable that the price of our product will continue its upward climb, although I trust not too quickly or too steeply.

At this point I am reminded of something I heard Congressman Curtis of Missouri say a few months ago and I quote:

"Why do we have the problem of health care for the aged? Because of the failure of our health care system? . . . not at all. We have it because people are living ten to 15 years longer. That is the result of success. Indeed, it has created cost problems, and if you went to a hospital 20 or 30 years ago, I guess the odds were that you might

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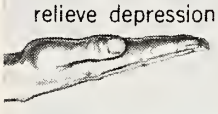
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There is, of course, one facet of this situation which is rarely, if ever, mentioned but should not be overlooked, and that is the restoration to economic, as well as physical, well-being and consequent wage-earning capacity of countless persons who in the days of so-called horse and buggy medicine would have wound up in the obituary columns or as long-term disability cases. I submit, and I believe all thinking people will agree, that when we look at both sides of the equation the conclusion is inevitable that modern medical care, expensive as it admittedly is, is a tremendous bargain.

Role of Government

Where does government fit into our future? None of us are, I believe, naive enough to believe that we have won anything in the way of a permanent victory. Indeed, if the President is to be believed, all that has happened is that we have been granted a temporary stay of execution. How then can we best combat this threat which still hangs heavy over our heads?

Obviously, all of us should push vigorously for an expansion and extension of our voluntary system to the greatest possible extent. At the same time we must recognize that there are certain areas and classes of citizens, e.g., the medically indigent where government intervention and support may be desirable although perhaps not an absolute necessity. Consequently, I think there is general agreement that we should not resist such cooperative endeavors as are provided for by Kerr-Mills and other similar legislation.

I guess what I am saying is that all of us acknowledge that every citizen, regardless of his or her circumstances, is entitled to the best and most complete medical care available. What we are against is government-dictated compulsory medical care, the recipients thereof being determined solely on the basis of age rather than that of need, and "financed" (if that is the right word and I doubt it) through an increase in Social Security taxes.

It is significant at this point, I think, to note that in 59 nations throughout the world, medical care for all or most citizens is provided by the government. Does the circumstance that the United States is not included in that number indicate that we are a backward nation or that we Americans are not conscious of our social responsibilities? Not at all! There are many factors contributing to that happy state of affairs. Not the least of these are the high levels of medical care which we are privileged to enjoy, the general availability of that care and, I hope you will agree, the existence of a strong, virile voluntary health insurance system.

Conclusion

An eminent Englishman of letters, John Galsworthy, has said, "If you do not think about the future you cannot have one." It is my hope, therefore, that these rambling comments will, if nothing else, at least have stimulated your thinking processes in that direction.

In the last analysis, the future of voluntary health insurance will, I suppose, be what we as American citizens want it to be. If we really think that government can and should do the job, then, obviously, that future is already behind us. If, on the other hand, enough of us are convinced that the voluntary way, imperfect as it admittedly is, is the better way and will get out and work and fight for our convictions, then that future is practically unlimited.

It has been well said that "Eternal vigilance is the price of liberty." May we all be eternally vigilant that our systems of voluntary medical care—and voluntary health insurance—and all other like bastions of freedom—be preserved for us and all future generations. ◄

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TAPES OF THE MONTH

PEDIATRICS

PD-6054 **HYPERKINETIC BEHAVIOR DISORDERS IN CHILDREN**—William Langford, M.D., New York, N. Y. Recorded: Kentucky State Meeting. Date: Sept. 19, 1961. Time: 30 minutes.

PD-6055 **THE PHYSICIAN'S RELATION TO THE PRACTICE OF PEDODONTICS**—Pat H. Lyddan, D.D.S., Louisville, Ky. Recorded: Kentucky State Meeting. Date: Sept. 20, 1961. Time: 20 minutes.

PD-6056 **PANEL ON BEHAVIORAL DISORDERS IN CHILDREN**—Kenneth Crawford, M.D., Louisville, Ky., moderator; William Langford, M.D., New York, N. Y.; Lovick Miller, Ph.D., Louisville, Ky.; Joseph B. Parker, M.D., Lexington, Ky. Recorded: Kentucky State Meeting. Date: Sept. 19, 1961. Time: 40 minutes.

DRUGS

D-8014 **VOLATILE ANESTHETICS AND DRUGS USED IN MENTAL ILLNESS**—John C. Krantz, Ph.D., Baltimore, Md. Recorded: Kentucky State Meeting. Date: Sept. 19, 1961. Time: 20 minutes.

RECTAL

PR-10002 **OFFICE TREATMENT OF ANO-RECTAL DISEASE**—James Barron, M.D., Detroit, Mich. Recorded: Kentucky State Meeting. Date: Sept. 21, 1961. Time: 25 minutes.

OTOLARYNGOLOGY AND OPHTHALMOLOGY

O-11005 **EMERGENCY AIRWAYS**—Lt. Col. George F. Rumer, M.C., Fort Sam Houston, Texas. Recorded: Kentucky State Meeting. Date: Sept. 20, 1961.

CHEST AND RESPIRATORY

CR-12000 **PANEL ON CHEST LESIONS (SELECTED CASE REVIEWS)**—David Shapiro, M.D., Louisville, Ky.; John S. Harter, M.D., Louisville, Ky.; Virgil A. Plessinger, M.D., Cincinnati, Ohio; Jerome F. Wiot, M.D., Cincinnati. Recorded: Kentucky State Meeting. Date: Sept. 19, 1961. Time: 1 hour, 10 minutes. ◄

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INDIANA STATE SOCIETY OF ANESTHESIOLOGISTS
Date May 18
Place Marott Hotel, Indianapolis

BONE AND JOINT CLUB
Date April 17
Place The Athenaeum, Indianapolis

INDIANA ACADEMY OF GENERAL PRACTICE
Date March 6-7
Place Murat Temple, Indianapolis

INDIANA STATE ASSOCIATION OF MEDICAL ASSISTANTS
Annual Convention
Date April 26, 27, 28
Place Claypool Hotel, Indianapolis

INDIANA NEUROPSYCHIATRIC ASSOCIATION
Date Second Wednesday of every month, October through May
Place Athenaeum, Indianapolis

INDIANA OBSTETRICAL AND GYNECOLOGICAL SOCIETY
Tri-City Meeting
Date April 3
Place I. U. Medical Center and Marott Hotel

INDIANA ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY
Date May 1-2
Place Culver Inn, Culver, Indiana

INDIANA ORTHOPAEDIC SOCIETY
Date May or June
Place Indianapolis

INDIANA ASSOCIATION OF PATHOLOGISTS
Date November 17
Place Methodist Hospital Conference Room

Annual Pathological Seminar
Date May 19
Place Veterans Administration Hospital

INDIANA CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS
Date October
Place Indianapolis

INDIANA PUBLIC HEALTH ASSOCIATION
Date April 24-25
Place Washington Hotel, Indianapolis

INDIANA ROENTGEN SOCIETY
Date First Sunday in May
Place Indianapolis, Indiana

AMERICAN COLLEGE OF SURGEONS, INDIANA CHAPTER
Date May 17, 18
Place Student Union Building Indiana University, Bloomington

INDIANA HOSPITAL ASSOCIATION
Date October
Place French Lick, Indiana

NORTHERN DISTRICT, INDIANA CHAPTER, AMERICAN PHYSICAL THERAPY ASSOCIATION
Date February 16
Place South Bend Memorial Hospital
Date March 16
Place Riley School, LaPorte
Date May 18
Place Ortho Manor, Fort Wayne



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For some of these patients, the onset of relief from pain was exceptionally prompt. Also, the average recovery time of good-or-excellent-response patients (among those whose recovery time was noted) was just over three days.

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Metaxalone has been studied pharmacologically since 1958. Clinical trials began about a year later. These investigations indicate that Skelaxin blocks reflex spasm and spasticity by suppressing nerve impulses in polysynaptic pathways, primarily in the spinal cord and to a lesser degree at supraspinal levels. It helps restore normal muscle tone without altering posture or gait and without producing sedative, hypnotic, or tranquilizing side effects.

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prescribing information:

dosage: For Skelaxin, two tablets t.i.d. or q.i.d. for not longer than 10 days. Dosage for children (6 to 12 years) should be adjusted according to body weight.

side effects: In 1502 patients given daily doses of Skelaxin ranging from 1200 to 9600 mg., 10.5% experienced side effects. These were generally mild, with nausea or gastrointestinal upset being most frequent. Only 0.5% experienced vomiting attributable to the drug, however. Other effects infrequently noted were drowsiness, dizziness, headache, nervousness or "irritability," and a hypersensitivity reaction of light rash. All cleared promptly upon withdrawal of the drug.

precautions: Variations in white cell count and hemoglobin levels have been reported in a few patients. Therefore Skelaxin therapy for more than 10 days is not recommended. A drug relationship was indicated in one of four cases of leukopenia reported in 360 Skelaxin-treated patients. In all cases followed-up, the WBC returned to normal after discontinuance of Skelaxin.

One instance of hemoglobin depression (less than 10 Gm.) which may have been drug-related was reported, in 306 patients; a return to an essentially normal level followed the discontinuance of medication.

One case of jaundice has been reported. Elevation of cephalin flocculation tests in several instances were not paralleled by changes in other liver function parameters. Urinalyses in 280 patients were essentially normal; false positive Benedict's tests, due to an unknown reducing substance in the urine, were reported in 9 patients.

contraindications: Do not administer to patients with known tendency to drug-induced anemia, or give to them only under careful supervision. Not recommended for use during pregnancy.

Robins

Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Mistaken Removal of Testicle Warrants Substantial Damages—An award of $100,000 in damages was granted by a federal district court in Tennessee for the removal of a patient's testicle by mistake. The error resulted from a mix-up of patients' charts.

The patient was scheduled to undergo a hemorrhoidectomy at the same time another patient was to undergo a hernia operation and an orchidectomy. Somehow, the charts of the two patients were switched by an attendant while both patients were under anesthesia and waiting to be taken to the operating room. A psychiatrist testified that the patient became extremely depressed when he learned of the loss of the testicle and that his mental and emotional outlook on life had been affected.

Huggins v. Graves (D.C., E.D., Tenn., June 6, 1962).

Ophthalmologist Cleared of Negligence In Treatment of Glaucoma—A directed verdict was properly granted in favor of an ophthalmologist charged with giving needless treatment for glaucoma for a period of over five years. An intermediate appellate court in California held that there was no testimony of medical witnesses which would permit a finding of negligence in the diagnosis or treatment of the woman patient.

The patient was first examined in 1952, and was found to have a slight amount of excessive intra-ocular pressure. From then until 1957, the ophthalmologist prescribed drops to relieve the pressure. Later that year, the patient was examined by another ophthalmologist whom the patient claimed told her she had never had glaucoma and had not needed treatment.

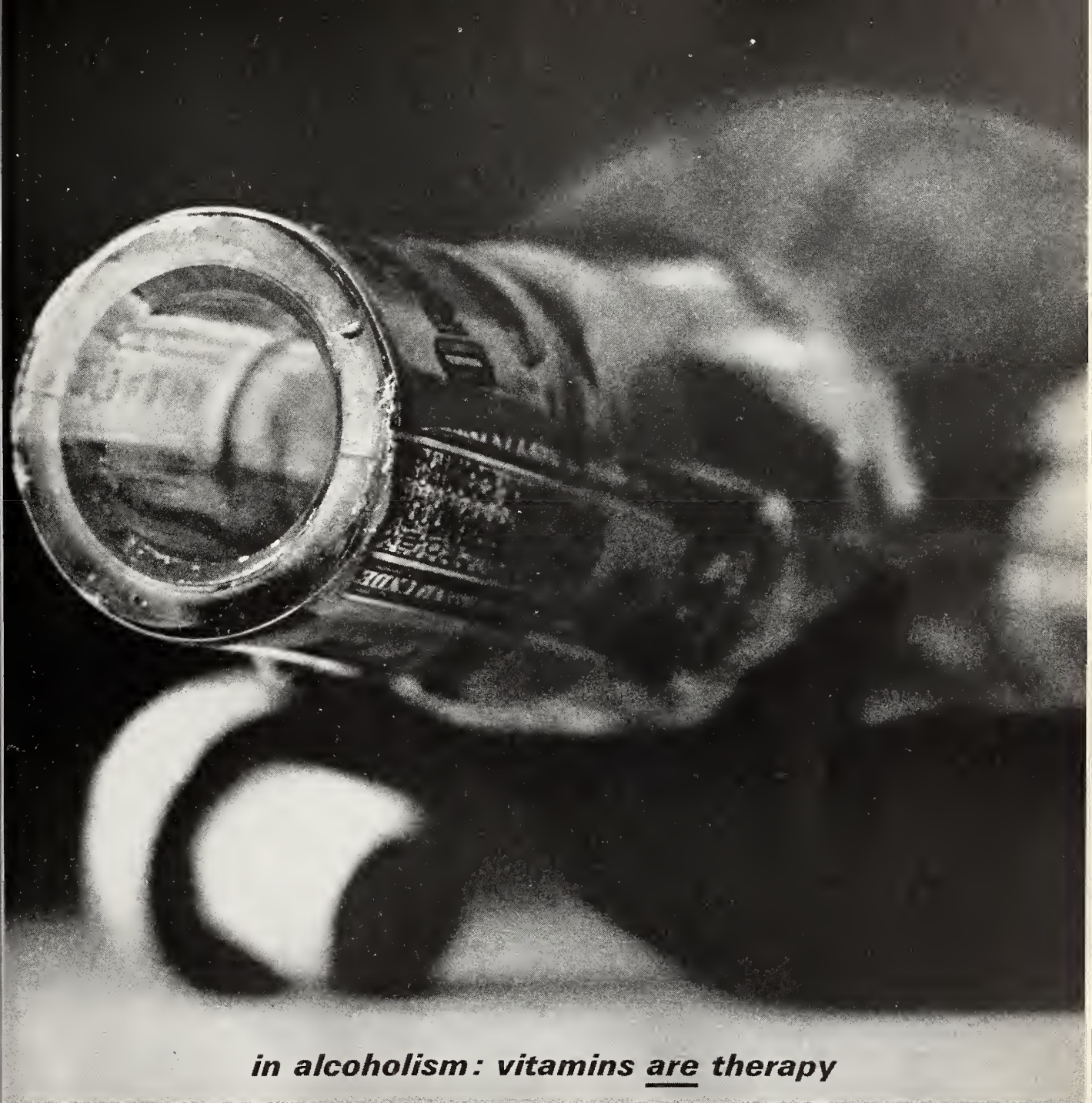
The court ruled that there was no evidence of negligence. It summarized the evidence as follows:

> "The uncontroverted expert evidence here indicated that simple glaucoma is a condition not easy to diagnose and that extensive tests are necessary for a diagnosis; that simple glaucoma has few symptoms and none which would reveal themselves readily to a layman, as the condition is a gradual one, in which the increasing intra-ocular pressure damages the optical nerve, resulting in the blurring of peripheral fields of vision and finally blindness; that it was good practice to treat a borderline case such as Mrs. Evans' immediately, as once a loss of vision occurs, it cannot be regained; that the condition could not be cured but only controlled by means of drugs which lowered the pressure; that there was only a tenuous connection between pregnancy and glaucoma; that between 1952 and 1957, new tests and theories about glaucoma were being developed and that while earlier, it had been believed that the disease was permanent, the authorities now recognized an incipient or intermittent type of glaucoma, which has no effect on fields of vision."

Evans v. Sarrail, 25 Cal. Rptr. 424 (Cal., Oct. 15, 1962).

Fraud by Doctor in Personal Injury

Continued



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Vitamin B_2 (Riboflavin)	10 mg.
Niacinamide	100 mg.
Vitamin C (Ascorbic Acid)	300 mg.
Vitamin B_6 (Pyridoxine HCl)	2 mg.
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MEDICINE AT LAW

Continued

*Claims Justifies Revocation of License**—Revocation of a doctor's license for preparing false medical reports and bills for an attorney in connection with personal injury claims was affirmed on appeal. The doctor was guilty of "fraud in the practice of medicine," the New York Court of Appeals ruled.

The doctor argued that the quoted statutory language was limited to mistreatment of a patient. The court rejected this argument and held that the Medical Practice Act authorizes discipline where fraud is perpetrated on interested parties other than patients. It also upheld a ruling of an intermediate appellate court that a unanimous vote by a legal quorum of the Committee on Grievances was sufficient to meet the requirements of a unanimous vote of the Committee to support disciplinary action. The fact that some members of the Committee were not present when the vote was taken did not invalidate the license revocation, the court said.

Wasserman v. Board of Regents of the University of the State of New York, 182 N.E. 2d 264 (N. Y., Apr. 5, 1962).

* *Citation Editor's Note:* The decision of the intermediate appellate court was reported in *The Citation*, Vol. 4, No. 3, p. 13.

Directed Verdict Reversed in Delay of Surgery Through False Diagnosis of Pregnancy—A patient was entitled to a jury trial on a claim that negligence of a doctor caused a delay of surgery following an erroneous diagnosis of pregnancy. A directed verdict against the patient was reversed by an intermediate appellate court in California.

The woman had delayed having surgery for a fibroid tumor of the uterus for approximately six years. Finally she agreed to surgery, but reported that she had missed a menstrual period. Because a laboratory test for pregnancy was positive, the doctor postponed the surgery. Although the patient reported bleeding regularly, a second test a month and a half later was also positive. The doctor did not see the patient again until four months later, at which time he determined that his previous diagnosis of pregnancy was in error. The patient then postponed the operation for several months, when, following an argument with the doctor, she was operated on by another doctor.

The court held that an error in diagnosis did not result in liability unless it resulted from the doctor's negligence. It also found that the medical evidence showed that there was no negligence on the part of the doctor in making the erroneous diagnosis. It held, however, that a jury question was raised as to the alleged negligence of the doctor in failing to follow up on the patient for four months after the second pregnancy test. The case was remanded for consideration of that issue alone.

Stephenson v. Kaiser Foundation Hospitals, 21 Cal. Rptr. 646 (Cal., May 17, 1962).

Jury Exonerates Cigarette Company in Lung Cancer Case—Although a federal court jury found that cigarette smoking contributed to a smoker's lung cancer, it held that the company was not negligent in selling the cigarettes which he smoked and that it made no express warranties on which he relied. The jury said that the smoker assumed the risk of injury by smoking the cigarettes.

In a previous trial, the judge had directed a verdict in favor of the company. The U. S. Court of Appeals for the Third Circuit, however, held that the suit should have been submitted to the jury. The present verdict in favor of the company is the outcome of the new trial.

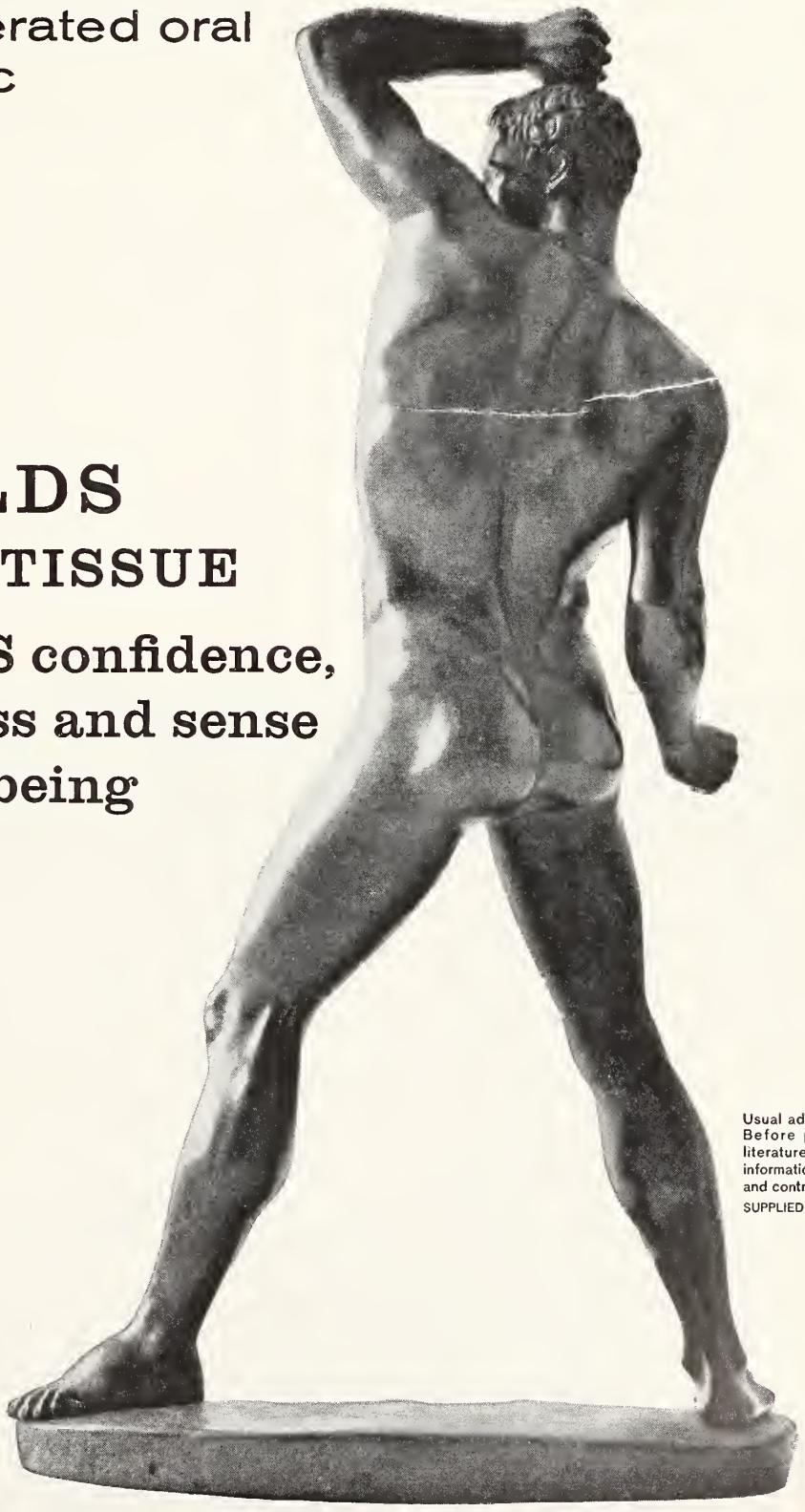
Pritchard v. Liggett & Myers Tobacco Co., (U. S. D. C., W. D. Pa., Nov. 11, 1962). ◄

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ABSTRACTS

BOOK REVIEWS

ATLAS OF CLINICAL ENDOCRINOLOGY

H. Lisser, M.D., Roberto F. Escamilla, M.D. The C. V. Mosby Co., St. Louis, 1962, 2nd Edition, 489 pages.

As the authors state in this second edition, their "pictorial approach" has been maintained. A quick perusal of the book reveals a remarkable collection of clinical photos. In many disease entities, serial photos of the same patient have been taken to show progression of the malady. However, in other cases representative pictures show only the extremes in physical change brought about by the endocrinopathies.

In outline form accompanying the illustrations are definitions, symptoms, physical findings, laboratory tests, differential diagnosis and treatment. Where appropriate, the hereditary character and transmission of the defect are illustrated with family tree diagrams.

Since, for the most part, this book contains material which is centered around photographic extremes, it has limited use, for most clinical endocrinopathies involve minute changes from the norm in both laboratory and clinical findings. This book is truly an atlas and its place is in the section on endocrinology of every medical library where it can be viewed by those traveling through medical school. The student will find the pictures interesting.

JOSEPH F. THOMPSON, M.D.
Indianapolis

PROBLEMS OF PULMONARY CIRCULATION

Ciba Foundation Study Group, Little, Brown and Co., 1961. 96 pages. $2.50.

This little 5"x7½" pocket book is a colloquium: the almost verbatim record of a day's discussion by 25 of the leaders in this field. The discussions ranged far and wide; each speaker assumed that his listeners were all his coequal experts in the topics being explored.

Is the pulmonary vascular bed organically obliterated by thrombotic processes as pulmonary arterial hypertension develops? Why is there selec-

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1 "significant hearing improvement" occurred with Arlidin in 32 of 75 patients with recent onset hearing impairment due to labyrinthine artery ischemia.
Rubin, W. and Anderson, J. R.: Angiology 9:256, 1958.

3 Arlidin "appears to be one of the most satisfactory [vasodilators], having the advantages of minimal side effects, being well tolerated and possessing a sustained action" in improving circulation of the inner ear.
Seymour, J. C.: Laryngology & Otology 74:133, 1960.

tive basal vascular constriction in mitral disease and not in congenital? And how does that explain orthopnea? Does reduction of the pulmonary vascular bed accelerate circulation through the capillaries to the extent that the *time* of contact between blood and alveolar oxygen becomes insufficient to ensure normal saturation of the blood before leaving the lung?

We are all familiar (or, are we?) with the carotid bodies, chemoreceptors and baroreceptors, hypercapnea and hypoxia and the interplay of the nervous reflex systems controlling the pulmonary circulation. Now just what do the various acute experiments on heart lung preparations prove?

The problems as set up raise more questions than they answer. The busy practitioner will NOT find easy the casual perusal of this little book. The more studious reader might go back to reading and re-reading each topic if only to observe how the minutiae of research fill in the background of accepted knowledge.

Arnold Lieberman, M.D.
New York, N.Y.

GYNECOLOGY

Langdon Parsons, M.D., Sheldon C. Sommers, M.D. W. B. Saunders Company, Philadelphia and London, 1962, 1250 pages.

To those who are in the laborious process of writing a gynecologic text or contemplate the same, take heed, for with the publication of *Gynecology* by Parsons and Sommers, the ultimate has appeared. The book, in short, is fabulous.

It tells the story of female genitalia and the ills that befall them from their genesis at conception to their exodus in the last chapter, "Geriatric Gynecology." Never has such a vast amount of practical information been placed between two covers.

The contents are uniquely arranged in the chronologic order of their appearance in life. Topics not touched upon in previous works are presented clearly. Chapters on genetic sex, factors concerned with sexual maturation, sexual precosity, tumors in childhood, and congenital anomalies are but a few covered in part one, Gynecologic Problems of Infancy and Childhood. The information given in the chapter on marital problems of the young woman is material that is long overdue appearing in standard texts. Male infertility and breast problems are likewise adequately covered.

The book is written on the postgraduate level. The student who desires but a casual acquaintance with gynecology would do better reading a less erudite work. Little mention is made of surgical technic. The authors have relegated this phase of

2

vascular insufficiency of the labyrinth is an important etiologic factor in sudden perceptive deafness . . . "vasodilators [Arlidin] are of considerable value."

Wilmot, T. J. and Seymour, J. C.: Lancet 1:1098, 1960.

4

early cases of sudden perceptive deafness should be treated by immediate stellate block "supplemented by the most effective vasodilator drug [Arlidin] . . . energetic measures to retain blood supply to the inner ear are imperative."

Wilmot, T. J.: J. Laryngology & Otology 73:466, 1959.

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Clinical benefit in approximately 50% of cases of recent onset hearing loss treated with adequate vasodilator and other supportive therapy is also reported by Sheehy.

Sheehy, J. L.: Laryngoscope 70:885, 1960.

IMPORTANT: Before prescribing ARLIDIN the physician should be thoroughly familiar with general directions for its use including indications, dosage, precautions and contraindication. Write for complete detailed literature.

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gynecologic training to its proper place, the surgical amphitheater and a few well illustrated atlases.

This book is a much needed addition to medical literature.

JOSEPH F. THOMPSON, M.D.
Indianapolis

Abstracts From Various Literature, Prepared by AMA

EXTERNAL CARDIAC MASSAGE: INDICATION, TECHNIQUE, AND RESULTS

The treatment of cardiac arrest has been revolutionized by closed-chest or external cardiac massage (rhythmic sternal compressions). External cardiac compression, by pressing on the sternum at intervals of one second is capable of maintaining a minimal circulation, when the thorax is not too rigid. However, after several compressions the pressure on the sternum should be interrupted for a short time in order to permit pulmonary inflation and oxygenation of the blood, an indispensable prerequisite of success. External cardiac massage is possible at the site of the accident, outside of the operating room, and even outside of the clinic. This has been proved in 222 cases of cardiac arrest in 197 patients; 117 of these survived, and 47 of them completely recovered. External cardiac massage is not to replace, but only to supplement internal cardiac massage after thoracotomy. The latter must be resorted to when external pressure on the sternum does not elicit a palpable pulsation, when other intrathoracic injuries exist, or when, with ventricular fibrillation, external defibrillation is impossible.

Frey, R., Jude, J., Safar, P.: External Cardiac Massage: Indication, Technique and Results, *Deutsch Med. Wschr.* 87:857, April 27, 1962.

WOUND WASHINGS FOR TUMOR CELLS

Wound washes from 169 patients were obtained either at operation or at autopsy and examined for tumor cells on a double blind basis. The cellular material was stained with hematoxylin-eosin and examined by a pathologist. Tumor cells were found in washes from (1) 25% of patients with cancer

Continued

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Literature available on request.

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and (2) 13% of patients where cancer was neither suspected nor subsequently found. Washes from Group 2, where cells that appeared malignant were detected, were termed "false positives." Although tumor cells can be isolated from wound beds, this study emphasizes the need for better cytological technics for the identification of malignant cells.

Weinlos, M., Macdonald, G. R., Taylor, J. D.: Histological Study of Wound Washings for Tumor Cells, *Canad. J. Surg.* 5:278, July, 1962.

TRANSTHORACIC DEFIBRILLATION

The authors list various causes of ventricular defibrillation, and point out that until electrical defibrillation was introduced about 15 years ago, the condition was usually fatal. Thoracotomy and exposure of the heart was necessary for the electrical defibrillators available earlier, but recent experiments on animals have revealed that defibrillation is possible also if the thorax is not opened. The authors describe animal experiments and therapeutic results on human subjects with an external defibrillator. The apparatus and its operation are described. Its performance was tested on cats. Large-surfaced plate electrodes which are applied to the thoracic wall are required for the application of the electrical current. The introduction of one or two defibrillation electrodes into the chambers of the heart either by catheter or puncture is not advisable, since burns may result. Additional experiments on animals revealed that the efficiency quotient of electrical defibrillation can be improved by combining defibrillation with external cardiac massage. Advantages and disadvantages and special indications for transthoracic defibrillation are discussed.

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Dittmar, H. A., Friese, G., Nusser, E.: Transthoracic Defibrillation, *Klin. Wschr.* 40:570, June 1, 1962.

SUCCESSFUL TREATMENT OF VENTRICULAR FIBRILLATION BY CLOSED CHEST CARDIAC MASSAGE AND TRANSTHORACIC DEFIBRILLATION

Until now, ventricular fibrillation (VF) was a fatal complication if immediate thoracotomy with exposure of the heart was impossible to perform. Since Kouwenhoven introduced the closed chest cardiac massage, it is possible to eliminate circulatory arrest without thoracotomy. It is vital that closed chest cardiac massage is started within the first five minutes after cessation of the circulation with simultaneously applied mouth-to-mouth respiration. As soon as possible transthoracic defibrillation should be applied. The histories of two patients in whom VF occurred after myocardial infarction are given. In both patients normal activity of the heart was restored by closed chest cardiac massage and transthoracic defibrillation. Physicians should closely observe the patients who are predisposed to VF, so that the necessary therapeutic actions may be started without delay. A defibrillator should always be in readiness, when catheterization of the heart or angiocardiography is performed.

Friese, G., Keck, E. W.: Successful Treatment of Ventricular Fibrillation by Closed Chest Cardiac Massage and Transthoracic Defibrillation, *Deutsch Med. Wschr.* 87:686, Apr. 6, 1962.

CLOSED CHEST CARDIAC MASSAGE: SURVIVAL AFTER FIFTY-FIVE MINUTES OF VENTRICULAR FIBRILLATION WITHOUT APPARENT SEQUELAE

Closed-chest cardiac massage can provide near-physiologic hemodynamics through rhythmic sternal compression. A case of successful resuscitation following 55 minutes of ventricular fibrillation is described. There were no overt neurologic or renal sequelae despite artificial maintenance of the circulation for almost one hour. Semiconsciousness and near-normal blood pressure levels were observed during the resuscitative procedure. The arrhythmia resisted several countershocks, but it was finally abolished after coarsening of the fibrillatory pattern by intracardiac administration of epinephrine. Following restoration of a sinusal mechanism, and enormous elevation of the serum lactic acid dehydrogenase was observed in conjunction with electrocardiographic abnormalities. These phenomena were transient and the patient made a complete clinical recovery. Closed-chest cardiac massage is a highly effective resuscitative technic with broad clinical applicability. Reports of complications should not deter physicians from learn-

ing and applying this technic under indicated circumstances.

Cohen, A. I. et al.: Closed Chest Cardiac Massage: Survival After Fifty-Five Minutes of Ventricular Fibrillation Without Apparent Sequelae, *Arch. Intern. Med.* 110:57, July, 1962.

LIVE POLIO VACCINE EVALUATION IN DADE COUNTY, FLA.

During the three-month period—February through April, 1960—414,118 persons were vaccinated with a single oral dose of the Lederle-Cox liquid trivalent attenuated poliovirus vaccine. On the basis of measurement of polio neutralizing antibodies in a random sample of 927 serums, and of changes in poliomyelitis antibodies in 2,753 paired serums collected before and three to four weeks after the oral administration of a single dose of the trivalent Lederle-Cox attenuated poliovirus vaccine, the following conclusions can be made. (1) Natural poliovirus infection in Dade County was extremely common. Thus, by the age of four years, one-half had been infected by all three types of poliovirus and only one in ten was still uninfected by at least one type. By age 14, nine out of ten had had triple infection and less than one out of 100 had been uninfected by poliovirus. (2) Of those who had received three or more injections of Salk vaccine, 99% had antibodies to Type II, 93% to Type I, and 87% to Type III. (3) Over-all oral vaccine efficacy as shown by serologic conversion was 93%; 95% for Type I, 80% for Type II, and 97% for Type III.

Hoffert, W. R., Schneider, N. J., Sigel, M. M., Clayton, L. B., Erickson, G. M., Flipse, M. E., Cato, T. E., Hardy, A. V.: Serological Aspects of Live Polio Vaccine Evaluation in Dade County, Fla., *Amer. J. Public Health* 52:961, June, 1962.

PULMONARY RESECTION IN INFANCY AND CHILDHOOD

A review of seven cases of pulmonary resection in children under five years of age is presented: three cases of lobar emphysema, one of adenomatoid malformation, one of bronchiectasis, one of leiomyoma, and one of ganglioneuroblastoma. There was no mortality. In cases of lobar emphysema the seriousness of this condition is pointed out because the emphysematous lung compresses the healthy lung and can produce rapid, severe respiratory insufficiency. Results of excision of the emphysematous lung are pointed out. One case of upper and middle lobe resection for this condition is reported. Adenomatoid malformation in an infant necessitated operation at 18 hours of age, and good result was obtained. The authors point out that children under five years of age are able to tolerate necessary resection of lung tissue remarkably well.

Nanson, E. M.: Pulmonary Resection in Infancy and Childhood, *Canad. Med. Ass. J.* 87:275, Aug. 11, 1962.

THE PATIENT, THE DOCTOR, AND THE HOSPITAL

It is suggested that those continually attending a general hospital for a chronic physical condition may be as much institutionalized as those spending many years in a mental hospital. The patient-doctor dependency relationship in hospital is examined. The patient is punctual, passive, polite, compliant, uninformative, expecting symptomatic treatment. His feelings of disappointed anger are only seen if the relationship is ended. The doctor's "apostolic function" and the "collusion of anonymity" are conducive to producing chronic patients. At the hospital the patient may lose contact with the world by being bossed, deprived, and drugged. Once having developed a chronic condition the patient is seen in clinics tending to perpetuate this state. Emotional problems may not be faced and the patient may be separated from his general practitioner. The problem may be solved by consideration of the whole patient—psyche and soma—and allowance of independence and maturation.

Heasman, G. A.: The Patient, the Doctor, and the Hospital, *Laneet* (London) 2:59, July 14, 1962. ◄



. . . yet ride a bike and ice skate, and have learned to roller skate, skip, and walk down the steps foot-over-foot."

Marian Phillips, school girl, began wearing a Hanger Hip Control Leg at the age of 10. The correct fit and dependable performance of her Hanger Leg have enabled Marian to take part in the normal activities of a teen-age girl. Her amazing rehabilitation is not unusual, others have been equally successful, and most Hanger wearers are able to return to a normal active life.

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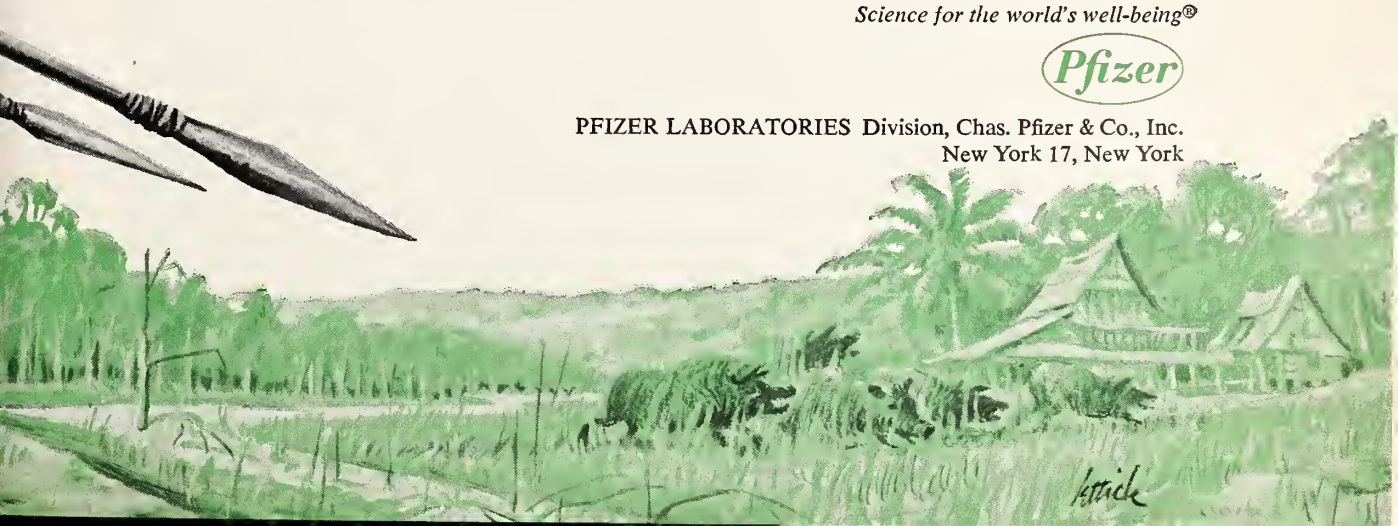
Tsutsugamushi, or scrub typhus, was responsible for incapacitating nearly 7,000 American soldiers during World War II. This disease is prevalent in areas overrun by jungle rats infested with mites carrying *Rickettsia tsutsugamushi.* Symptoms include a primary lesion at the site of the mite-bite, fever reaching as high as 105°, and a cutaneous rash. Injected conjunctivae, deafness, delirium and racking cough mark the advance of the disease. Mortality rates as high as 60 per cent have been reported. Terramycin is one of the antibiotics of choice for rapid and effective control of the acute stage of the infection. Patients become afebrile and virtually asymptomatic 24 to 36 hours after beginning treatment.

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Eleuterio G. Lim, 6002 B Green Meadows Pkwy., Baltimore 9, Md.—*Radiology*

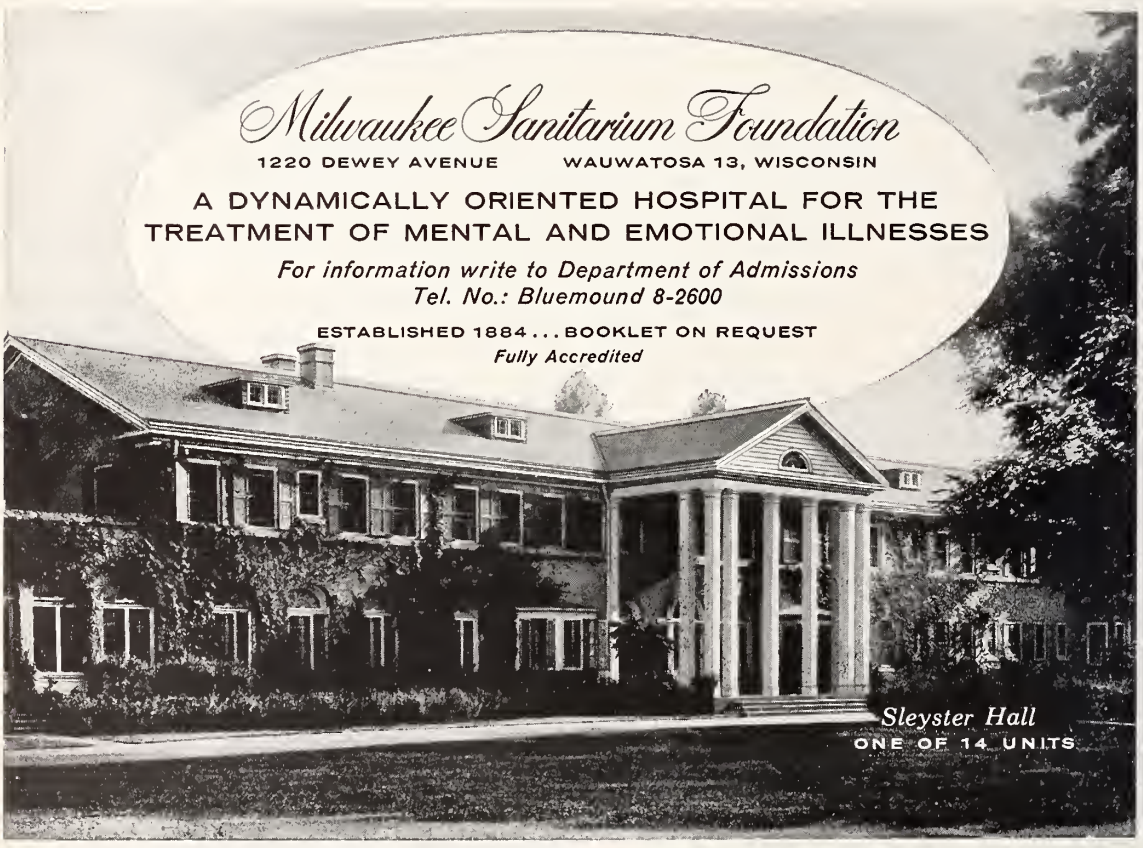
Sam Shragg, 5400 W. 96th St., Los Angeles, Calif.—*Radiology*

Nicholas P. Rossi, 103 Halley St., Iowa City, Iowa—*General and Thoracic Surgery*

George C. Hill, VAC P. O. Box 372, Dayton, Ohio—*General Surgery*

ADDITIONAL LOCATIONS

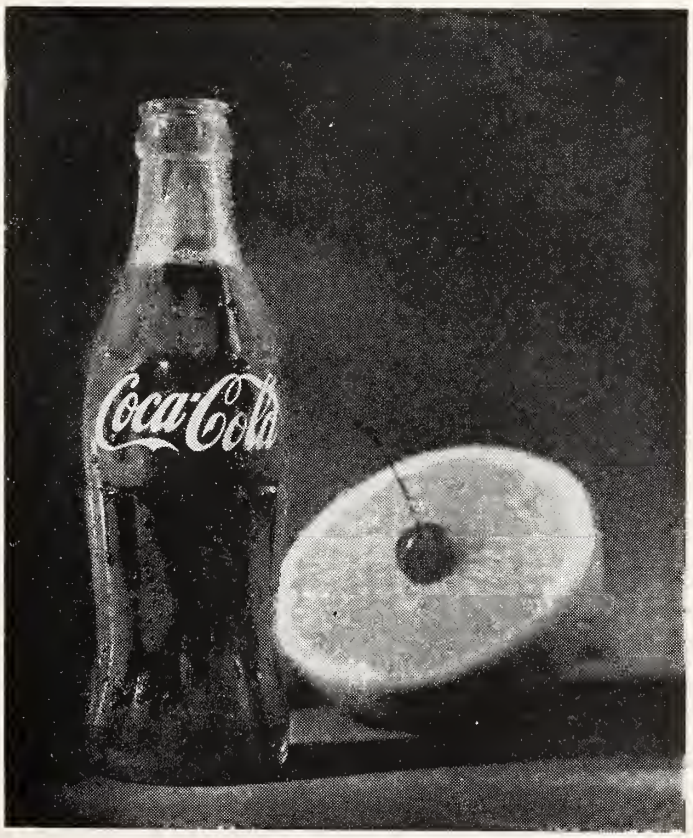
Madison County—PENDLETON—Population 3,000 with 6,000 population within a radius of three to five miles. Office and equipment of the late Dr. C. P. McLaughlin available. Nearest hospital located eight miles away at Anderson, Indiana. Housing available. Chamber of Commerce and civic organizations willing to help physician get established. Contact Mr. William Purkey, Pendleton and Mr. Fred Taylor, R. R. 3, Pendleton, for details. ◄



INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—December, 1962

Disease	Dec. 1962	Nov. 1962	Oct. 1962	Dec. 1961	Dec. 1960
Animal Bites	397	526	603	330	289
Chickenpox	754	367	128	460	507
Conjunctivitis	103	85	41	63	87
Diphtheria	1	0	1	0	1
Dysentery, Unspecified	65	46	37	41	16
Impetigo	88	151	153	136	162
Infectious Hepatitis	71	55	66	180	162
Infectious Mononucleosis	21	20	6	17	23
Influenza	1329	1351	957	1135	1065
Measles (Rubeola-Rubella)	234	140	77	219	335
Meningitis, Meningococcal	2	2	1	2	3
Meningitis, Other	12	10	13	21	12
Mumps	153	188	55	217	364
Pertussis	68	72	36	17	13
Pneumonia	167	148	75	198	213
Poliomyelitis	3	4	5	3	13
Streptococcal Infections	436	321	278	423	569
Tinea Capitis	33	12	14	20	31
Tuberculosis (Active)	96	110	121	125	Not Available



Coca-Cola, too, is compatible with a well-balanced menu. As a pure, wholesome drink, it provides a bit of quick energy..brings you back refreshed after work or play. It contributes to good health by providing a pleasurable moment's pause from the pace of a busy day.

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Technical Papers Sought for 16th Conference of Engineering in Medicine

Applications to present papers to the 16th Conference of Engineering in Medicine and Biology are now being accepted. The Conference is scheduled to meet in Baltimore November 18 to 20, 1963.

Technical papers especially sought are either those dealing with the creative evaluation of patient monitoring systems or those discussing the details of operation of analog-to-digital conversion systems. Further information may be obtained by addressing the conference at Jenkins Hall, Johns Hopkins University, Baltimore 18.

"Food Hints for Mature People" Pamphlet Available to Physicians

"Food Hints for Mature People" is a 28-page Public Affairs pamphlet. Written by Charles G. King, Ph.D., president of the Nutrition Foundation, the text discusses food, nutrition and health in a sensible manner.

Copies are available at 25 cents each, and for less in large quantities. Write Public Affairs Pamphlets, 22 E. 38th St., New York 16. The booklet might be a good homework assignment for patients who have dietary problems, especially those involving overweight.

Dr. Edwin Pontius has been elected president of the Indiana Association of Pathologists. Dr. Max Rudicel, Kokomo, will serve as president-elect for the coming year and Dr. David Adler, Columbus, as secretary-treasurer.

Bluffton Caylor-Nickel Research Foundation to Receive $84,800 Grant

The Caylor-Nickel Research Foundation of Bluffton will receive a grant of $84,800 from the U. S. Public Health Service for the purpose of establishing and equipping medical research laboratories. This is a part of more than $21 million granted to 54 institutions in 28 states for construction of health research facilities.

Dr. Francis G. Zeier of Evansville will serve as an orthopedic surgeon along with 26 other physicians and two dentists on the seventh team serving aboard the hospital ship S. S. Hope during its current visit to Peru.

The ship has been anchored off Salaverry, Peru since May, 1962 and will remain there until March, 1963, when it will return to the United States. The new team of professional men will be flown to Peru to relieve a team which is finishing its tour of duty. This is the Hope's second voyage. In 1960 and 1961 it visited Indonesia and South Viet Nam.

Seven Motion Picture Films on Air Pollution Available

The air pollution problem is outlined and discussed in a group of seven motion picture films now available for distribution by the U. S. Public Health Service. All films are 16 mm and with sound tracks, some are black and white, some are color. All are available on free loan. A folder describing the films may be obtained by writing Communicable Disease Center, Atlanta 22, Georgia. ◄

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4,260 More Hoosiers 65 and Over Enrolled In Blue Cross—Blue Shield During Successful 1962 Open Campaign

(One of a series prepared by Blue Cross-Blue Shield)

Campaign Highlights

1. 11,979 new members joined Blue Cross-Blue Shield during the enrollment campaign open to all Indiana residents held October 1 through October 8, 1962. Membership was offered to everyone, regardless of age, physical condition, or place of employment.
2. 4,260 of these new members were age 65 and over, and of this total 1,777 were 75 and over. Today more than 150,000 Indiana senior citizens are voluntarily enjoying the security of membership in Blue Cross-Blue Shield. This represents more than 35% of the state's 65 and over eligible population, excluding 43,000 who are in institutions or who are receiving Old Age Assistance.
3. More than 50,000 members age 65 and over have been enrolled during the six open campaigns held since 1954. The other thousands of aged members have Blue Cross-Blue Shield protection because they were able to continue membership when they retired or left a group, or through the individual direct pay programs available the year around. Inquiry cards for the latter membership are available in many doctors' offices.
4. The Indiana campaign for the first time offered a choice of high or low benefit options. Of the 65 and over age group, 2,766 chose the high option, and 1,585 the low option, proving that most senior citizens want and will pay for broader coverage.

FOR THE STATISTICALLY MINDED

	65 And Over Enrollment During Open Campaigns		Percentage of Total Distribution by Age Groupings	
			65-74	75 & over
1954	16,340	1954	23.5	9.6
1955	7,986	1955	19.5	8.6
1959	8,404	1959	23.0	11.9
1960	8,203	1960	24.6	14.1
1961	5,032	1961	22.9	13.9
1962	4,260	1962	25.2	18.6

W. C. Huddlestone
Public Relations Division ◄



they never even had a chance to complain about the cost of drugs

Walk through any older cemetery, and you will find the same ugly story repeated many times. Died, age 30 years... died, age 8 years... died, age 6 months.

Sometimes, you will see evidence of entire families being struck down almost simultaneously. You wonder, was it influenza? Diphtheria? Infectious diarrhea? Or a host of other diseases whose very names were synonymous with terror?
You will see, "Died, age 22 – childbirth."

There are many reasons why you don't see a continuation of these tragic stories today – not the least of which has been the dedication of American physicians and the quality of medical education. And another, we sincerely believe, has been the quality of medicines which have been made available.

Yet, the value of independent drug research has been seriously challenged – research which has, in the past 30 years alone, helped to add nearly 10 extra years to the average lifespan in the United States. Yet, because the cost of the search must be reflected in the price the patient pays for a prescription, is it too expensive to continue? Unfortunately, perhaps those who might have the best answer can offer only silent testimony.

This message is brought to you on behalf of the producers of prescription products.

A reproduction, for display in your waiting room, is available. Write:
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FUTURE MEETINGS, SEMINARS, COURSES

Medical Electronics Conference To Meet July 22-26 in Belgium

The Fifth International Conference on Medical Electronics will meet on July 22 to 26, under the patronage of the University of Liege, at Liege, Belgium. Simultaneous translation will be provided in English and French. Applications for attendance may be obtained by writing Dr. F. Bostem, 23 Boulevard Frere Orban, Liege, Belgium.

Pulmonary Insufficiency Colloquy Offered March 28-30 in Oklahoma

The Fourth Oklahoma Colloquy on Advances in Medicine will be held in Oklahoma City, at the Medical Center Auditorium, March 28 to 30, on the subject of Pulmonary Insufficiency. Distinguished teachers and investigators from the United States, Canada and England will participate. Inquiries should be addressed to Dr. Robert Byrd, 800 N. E. 13th, Oklahoma City.

Physicians Invited to American College Of Surgeons Sectional Meeting March 11-14

A four-day sectional meeting for doctors and nurses will be held by the American College of Surgeons in Pittsburgh on March 11 to 14. Surgeons, graduate nurses and other interested medical personnel are invited to attend. Scientific sessions will be devoted to general surgery and all the surgical specialities. A special nurses' program will be conducted.

Postgraduate Course in Care of Adolescents Set for April 29-May 3

A postgraduate course in the Medical Care of Adolescents will be conducted in Boston from April 29 to May 3, at the Adolescent Unit of the Children's Medical Center, 300 Longwood Avenue. Details may be obtained by writing J. Roswell Gallagher, M.D.

50 Scientific Papers and Exhibits Listed for Industrial Health Meeting

The American Industrial Health Conference will be held at the Sheraton-Park Hotel, Washington, D. C., on March 18 to 21. This will be the 48th annual meeting of the Industrial Medical Association and the 21st annual meeting of the American Association of Industrial Nurses. All aspects of industrial medicine and industrial health will be covered by over 50 scientific papers and scientific exhibits.

ISMA Invited to Proctology Teaching Seminar March 16-21 in Las Vegas

The 15th annual teaching seminar of the International Academy of Proctology will meet in Las Vegas, Nevada, March 16 to 21. Members of ISMA are invited to attend. Further details may be obtained by writing Dr. Jacob Reichert, Park Central Medical Bldg., Phoenix, Arizona.

Nine Month Cardiology Tutorial Program Offered by California Clinic

A nine month tutorial program in cardiology, September 15, 1963 to June 15, 1964, will be offered by the Institute for Cardiopulmonary Diseases, Scripps Clinic and Research Foundation, La Jolla, California.

This will be an intensive, academic effort covering the field of cardiovascular diseases and is especially designed for the practitioning physician who desires thorough instruction in this field and for the physician who is finishing his period of formal training and wants a final intensive orientation in cardiology.

For details, write: executive secretary, Institute for Cardiopulmonary Diseases, Scripps Clinic and Research Foundation, La Jolla, Calif.

Ob-Gyn Board Sets Part II Oral and Clinical Examinations

The next scheduled examination (Part II), oral and clinical, will be conducted for all candidates at the Edgewater Beach Hotel, Chicago, Ill., by the entire board, April 29-May 4. Formal notice of the exact time of each candidate's examination will be sent him or her in advance of the examination dates.

All prospective candidates are urged to review the current requirements before applying for board examination and diplomates are requested to keep the board office informed of a change in address.

For further information, write the secretary, Robert L. Faulkner, M.D., 2105 Adelbert Rd., Cleveland 6, Ohio.

Ophthalmology, Otolaryngology Meeting Scheduled for April 17-20

The West Virginia Academy of Ophthalmology and Otolaryngology will hold its sixteenth meeting at the Greenbrier Hotel, White Sulphur Springs, West Virginia on April 17-20, 1963. An outstanding program in both specialties is planned with guest lecturers. Additional information may be obtained by writing Dr. Worthy W. McKinney, Beckley, West Virginia.

"Special Problems in Urology" Course Listed by Cleveland Educational Clinic

The Cleveland Clinic Educational Foundation is offering a postgraduate continuation course in urology March 6 and 7 this year.

Due to limitation of auditorium capacity, registration will be limited to 125. Acceptances will be made in the order of application. Registration fee is $30.00.

Further information may be obtained by writing the Education Secretary, Cleveland Clinic Educational Foundation, 2020 E. 93rd St., Cleveland 6.

Gynecological Problems in Private Practice Course Offered in Georgia

Office care and certain minor surgical procedures will be emphasized in the postgraduate course, Gynecologic Problems in Private Practice, March 12-14 at the Medical College of Georgia.

The course covering subjects of interest in the management of the private gynecologic patient will also include functional and endocrine disturbances and certain aspects of infertility.

Each course is acceptable for 18 hours credit by the American Academy of General Practice. Registration is limited to a small group for close faculty-participant communication. Registration fee is $50.00. Application can be made by contacting Dr. Claude-Starr Wright, Director, Department of Continuing Education, Medical College of Georgia, Augusta, Georgia.

Tri-City Meeting of Ob-Gyn Society Set for April 3 in Indianapolis

The Tri-City meeting of the Indiana Obstetrical and Gynecological Society will gather April 3 in Indianapolis.

Members of Ob-Gyn societies in Louisville and Cincinnati will join the Indianapolis group at the I. U. Medical Center for the day meeting. The evening portion of the program will be at the Marott Hotel. Dr. Howard Jones, of Johns Hopkins University, will be the principal speaker. ◄


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Deaths

Roscoe Lloyd Sensenich, M.D.

Dr. Roscoe L. Sensenich, one of the great figures in Indiana medicine, died in South Bend on January 18, at the age of 80.

Dr. Sensenich, who was born in Elkhart county in 1882, was graduated from Rush Medical College in 1905. Two years later he moved to South Bend where he practiced until his retirement in 1956.



Dr. Sensenich was one of the founders of the South Bend Medical Foundation. A former board president of the Healthwin Tuberculosis Hospital and a past president of the Indiana Tuberculosis Association, he was the recipient of the Auerbach Memorial Award in 1951 in recognition of his fight against T.B.

Dr. Sensenich was a major in the United States Army in World War I and in World War II was a member of the board which planned the drafting of a medical system for the Army. President-elect in 1935, Dr. Sensenich, due to the sudden death of Dr. Walter J. Leach whilst in office, served as president for the remainder of Dr. Leach's term, thereby filling the position of leader of the State Association for two years.

Active on many committees and commissions of ISMA, particularly with regard to the Indiana Crippled Childrens Bureau, Dr. Sensenich also served as delegate to the AMA. For ten years he was on the AMA Board of Trustees. In 1946 he became president of the American Medical Association.

In December, 1936, during his term of office in the State Association, Dr. Sensenich wrote in *The Journal* as follows:

"Time moves on, and medical science, social and governmental philosophy, our affairs and ourselves move with it. Our future position, amid change, will depend upon the vitality of our ideals and the energy which we expend in maintaining our direction and progress."

To remember these words and carry out this advice will be one of the most fitting tributes that can be paid to the memory of Dr. Roscoe Lloyd Sensenich.

William L. DeRenne, M.D.

Dr. William DeRenne, 50, past president and secretary of the Vermillion County Medical Society, died Nov. 28 in Lakeview Hospital, Danville, Ill.

Dr. DeRenne, a general practitioner, was graduated from the University of Illinois in 1941. He had practiced in Newport and Clinton, Ind., and was a former Vermillion County health officer.

Samuel S. Frybarger, M.D.

Dr. Samuel S. Frybarger, retired Converse physician, died Dec. 5 in the hospital at Huntington.

Dr. Frybarger, 79, was a former Miami County school teacher and had resided at Converse since 1940. A member of the Miami County Medical Society, Dr. Frybarger was graduated from Valparaiso Uni-

versity, and Loyola Medical College in Chicago, and received his M.D. degree in 1916.

Harry K. Langdon, M.D.

Dr. Harry K. Langdon, retired Indianapolis physician, died Dec. 15 in the VA Hospital, West 10th St.

Dr. Langdon, 88, was an Indianapolis physician about 50 years. He was a veteran of the Spanish-American War and World War I and was graduated from the Indiana Medical School in 1899. Dr. Langdon served as a physician during the 500-Mile Races at the Indianapolis Motor Speedway from the start in 1911 to 1936. He was a member of the Marion County Medical Society and a member of the ISMA 50-Year-Club.

Calvin P. McLaughlin, M.D.

Dr. Calvin P. McLaughlin, 55, was found dead in his Pendleton home Dec. 13.

A 1931 graduate of the Indiana University School of Medicine, Dr. McLaughlin was on the staffs of St. John's and Community Hospitals in Anderson, and was a member of the Madison County Medical Society.

Thomas R. Thomas, M.D.

Dr. Thomas R. Thomas, Hammond physician and surgeon, was found dead in his home Dec. 10.

Dr. Thomas, 32, was a graduate of the University of Chicago. He was on the staff of St. Margaret's Hospital, Hammond, and a member of the Lake County Medical Society.

John R. Thrasher, M.D.

Dr. John R. Thrasher, 81, who passed away Dec. 5, had practiced medicine in Indianapolis for more than 50 years and was an emeritus faculty member of Indiana University Medical School.

Dr. Thrasher was graduated from the University of Michigan in 1903 and the old Indiana Medical School in 1905. In addition to his private practice and teaching, he conducted a clinic at the medical school. Until his retirement, he was on the staffs of Long and Riley Hospitals.

A Senior Member and member of the ISMA 50-Year-Club, Dr. Thrasher also belonged to the Marion County Medical Society. ◄

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Division of Postgraduate Medical Education of the I. U. School of Medicine

Tentative list of Postgraduate Courses for 1963. All courses unless otherwise indicated will be held at the I. U. Medical Center.)

February 20, 1963	Orthopedics
February 21, 1963	Ophthalmology for the General Practitioner
March 13 and 14, 1963	Obstetrics and Gynecology
March 20 and 27, 1963	Psychiatry (at Bedford)
March 25 to April 6, 1963	Anatomical and Clinical Otolaryngology
April 10 and 11, 1963	Clinical Heart Disease
April 17 to 21, 1963	Diagnostic Radiology
April 24 and May 1, 1963	Psychiatry (at South Bend)
May 15 and 22, 1963	Psychiatry (at Lawrenceburg)
May 15, 1963	Medical Treatment of Malignancy
May 16, 1963	Medical Problems in Renal Disease

Pathologists Extend Control Program

The American Society of Clinical Pathologists is extending the use of its laboratory quality control program to all hospitals in the U. S. The program has been utilized by members of the Society and has contributed so materially to laboratory accuracy that its benefits are being made available to all laboratories.

Full details and forms for ordering the Quality Control Manual and Quality Control Kit may be obtained by writing Dr. Coye C. Mason, 2052 North Orleans St., Chicago 14.

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County, District News

Seventh District

Dr. Ray D. Miller, Martinsville, has been elected president of the Seventh District Medical Society for the coming year. Dr. Jack L. Walters, Franklin, was re-elected secretary.

Eighth District

The Eighth District Medical Society has set their annual meeting for June 5 this year. The meeting will be held at the Portland Country Club, Portland, Ind.

Ninth District

The Ninth District Medical Society has elected Dr. Clarence G. Kern, Lebanon, as president for the coming year and Dr. Donald W. Boyer, also of Lebanon, secretary.

Tenth District

May 8 and October 9 have been chosen as the annual meeting dates of the Tenth District Medical Society.

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ADDRESS_____

CITY_____ STATE_____

Eleventh District

Dr. Bernard Hall, Logansport, was re-elected president of the Eleventh District at its annual meeting Sept. 19. Dr. C. L. Wise, Camden, was re-elected secretary-treasurer, and Dr. Lowell Hillis, Logansport, was chosen alternate councilor.

Thirteenth District

Dr. Robert Rouen, Elkhart, and Dr. Cecil R. Burket, Bremen, have been re-elected president and secretary of the Thirteenth District Medical Society. The election, held Sept. 19 in South Bend, resulted in the selection of Dr. Jene Bennett, South Bend, as councilor and Dr. John T. Kemp, Michigan City, as president-elect.

Adams

The Adams County Medical Society met Dec. 11 to elect new officers, hear Miss Nelson speak on "County Welfare" and see a movie on anesthesia. Newly elected officers are Drs. C. W. Freeby, Decatur, president; Robert Boze, Berne, vice-president and Howard Luginbill, Berne, secretary-treasurer.

Bartholomew-Brown

Dr. Henry G. McCullough was elected president of the Bartholomew-Brown County Medical Society at its meeting Dec. 12 in Columbus. Other newly elected officers include Drs. Richard B. O'Bryan, vice-president; Thomas Dugan, secretary-treasurer; L. L. Gammell, delegate and A. L. Henry, alternate. All of the doctors are from Columbus. There were 26 members attending the meeting.

Clark

Nineteen members of the Clark County Medical Society met Dec. 18 and elected Dr. George Wolverton, Clarksville, as their president for the coming year. Other new officers are Drs. David H. Jones, Charlestown, secretary-treasurer; Eli Goodman,

Charlestown, delegate and J. T. Carney, Jeffersonville, alternate.

Clay

The Clay County Medical Society elected Dr. Walter C. Bond, Clay City, president at its Dec. 11 meeting. Dr. Forrest R. Buell, Clay City, was chosen secretary-treasurer and Dr. Charles Moon, Center Point, delegate. Eight members attended the meeting.

Floyd

Senator Robert O'Bannon and Representative Charles Kirk attended the Dec. 14 meeting of the Floyd County Medical Society to discuss "The Coming Legislative Session" with the 24 members present. Election of officers followed, with Dr. Nelson A. Wolfe chosen president. Dr. Daniel H. Cannon was elected secretary-treasurer; Dr. Donald R. LaFollette, delegate and Dr. Kenneth H. Brown, alternate. All of the doctors are from New Albany.

Fountain-Warren

The Fountain-Warren County Medical Society will be headed by Dr. Edward M. Humphrey, Covington, this year. Elections were held at the Dec. 13 meeting of the society. Other new officers are Drs. Peter R. Petrich, Attica, secretary-treasurer; Petrich and James W. Crain, Williamsport, delegates and Lowell R. Stephens, Covington and Carl A. Nelson, West Lebanon, alternates.

Fulton

Dr. William J. Rusler, Rochester, has been elected president of the Fulton County Medical Society. Assisting him will be Dr. Kenneth K. Kraning, Kewanna, as secretary-treasurer.

Hendricks

The Hendricks County Medical Society has elected Dr. Thomas Walker, Brownsburg, president. Other new officers are Drs. Naomi Dalton, Danville, secretary-treasurer; O. T. Scamahorn, Pittsboro, delegate and Irving Cohen, Plainfield, alternate.

Henry

Dr. Leonard H. Wiatt, Knightstown, has been elected president of the Henry County Medical Society. Dr. Alfred E. Hollenberg, Hagerstown, will serve as secretary-treasurer.

Huntington

Dr. Carl W. Goebel, Ft. Wayne, spoke on "Fluids and Electrolytes" before 18 members of the Huntington County Medical Society Dec. 11. Dr. Warren M. Van Campen, Huntington, was elected president and Drs. D. Richard Gill, secretary-treasurer; Richard W. Wagner, delegate and Joseph Clark, alternate. All of the officers reside in Huntington.

Jackson-Jennings

Dr. M. O. Alcorn gave a scientific program before the December 14 meeting of the Jackson-Jennings County Medical Society.

Jefferson-Switzerland

Dr. Wallace Childs, Madison, has been elected president of the Jefferson-Switzerland County Medical Society for 1963. Working with him will be Drs. Ott B. McAtee, secretary-treasurer; Robert O. Zink and Francis Prenatt, delegates and George A. May, alternate.

LaGrange

Dr. Harley Flannigan, LaGrange, is the new president of the LaGrange County Medical Society. Dr. M. Reed Taylor, Howe, is the new secretary-treasurer.

Lake

The Lake County Medical Society, 450 strong, met Dec. 16 in Chicago for its annual holiday party and trip to the ice show.

Lawrence

Field Secretary Robert Amick met with the Lawrence County Medical Society Dec. 5. There were 17 members present.

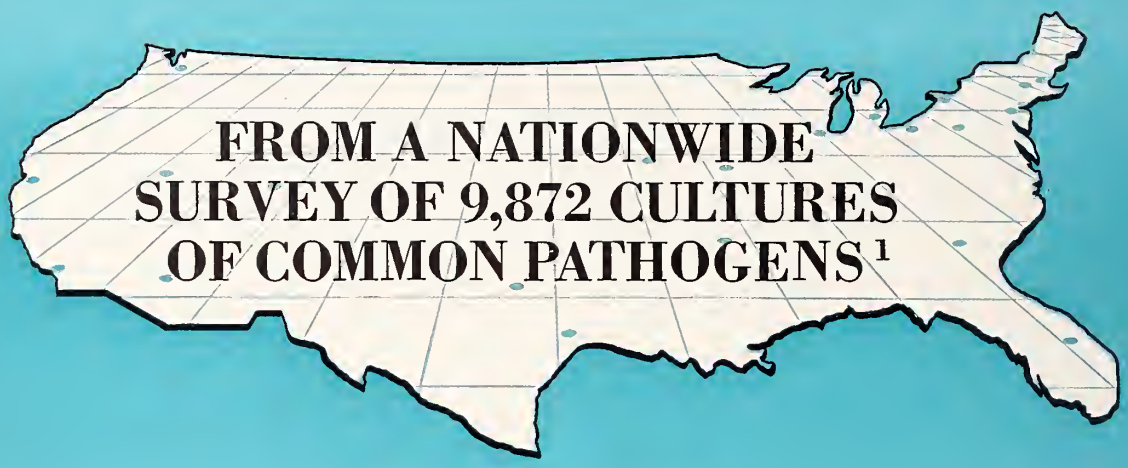
Marion

Dr. Donald E. Wood has been elected president of the Marion County Medical Society. Assisting him in 1963 will be Drs. Albert N. Donato, president-elect; James H. Gosman, vice-president and George T. Lukemeyer, secretary-treasurer.

Noble

Dr. Charles Bowman, Albion, was elected president of the Noble County Medical So-

Continued on page 262



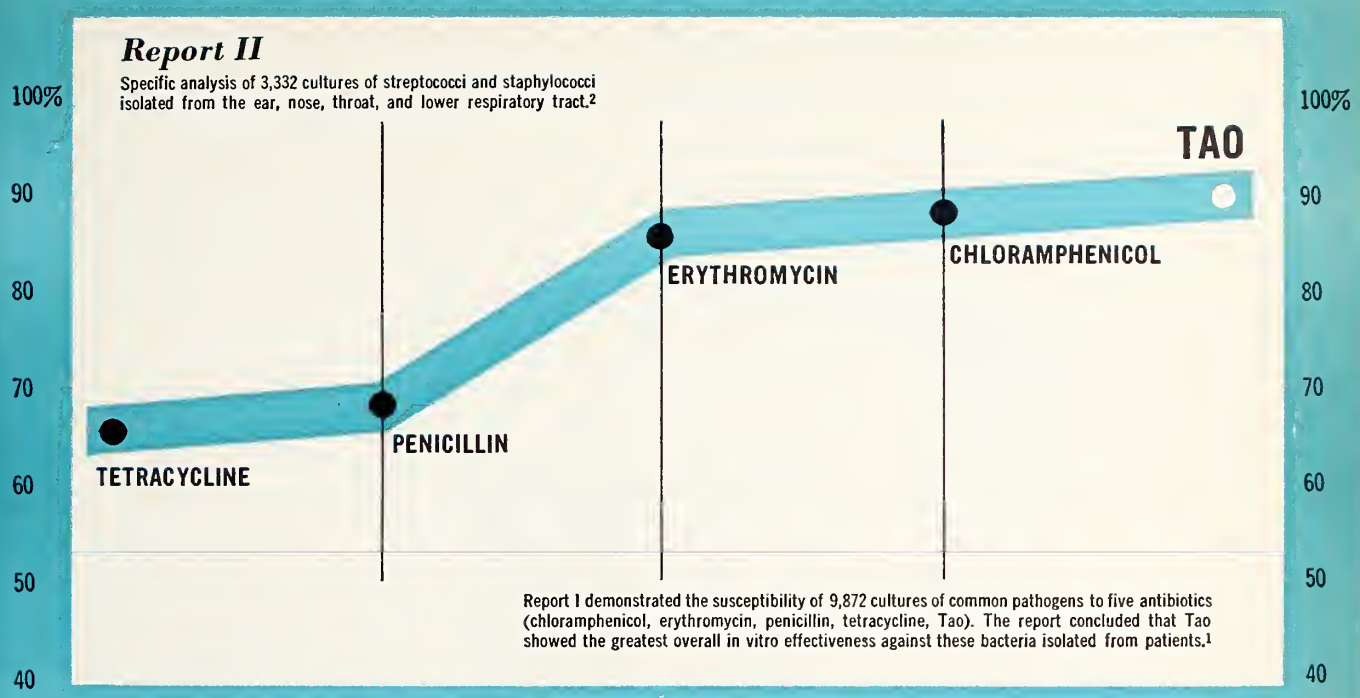
FROM A NATIONWIDE SURVEY OF 9,872 CULTURES OF COMMON PATHOGENS[1]

Conclusions of Nationwide Survey: *Report I*

1. **Even after five years of general use,** Tao, of the antibiotics tested, demonstrated greatest activity against respiratory streptococci and staphylococci (3,332 cultures).

2. **Overall results showed a higher percentage of susceptibility** among these common pathogens to Tao than to the other antibiotics. Susceptibility to Tao was greatest, not only in respiratory streptococci and staphylococci, but also in these organisms isolated from skin and soft tissue (3,423 cultures), genitourinary and gastrointestinal tracts and other sources (2,458 cultures). Susceptibility was equal to all antibiotics tested in pneumococci from unspecified sources (463 cultures), and less to Tao in H. influenzae from unspecified sources (196 cultures).

3. **Tao has been used for five years without development of predictable cross resistance.** In 1958 and 1961, approximately 73% and 70%, respectively, of erythromycin-resistant problem staphylococci showed susceptibility to Tao.[3,4] The present study confirms the continuing high degree of Tao activity even against these pathogens. Of 1,592 cultures of erythromycin-resistant staphylococci, 68% were susceptible to Tao, while in the reverse situation, only 33% of 768 Tao-resistant staphylococci were susceptible to erythromycin.



Report II

Results of Bacterial Susceptibility in 3,332 Respiratory Pathogens

References

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ciety Dec. 20. Other newly elected officers are Drs. C. F. Stallman, Kendallville, secretary-treasurer; Robert Bryan, Kendallville, delegate and Donald J. Hooker and Robert C. Stone, both of Ligonier, alternates.

Owen-Monroe

The Owen-Monroe County Medical Society elected Dr. John M. Miller, Bloomington, president at its Dec. 20 meeting. Also elected were Drs. Harold Manifold, Bloomington, secretary-treasurer; Paul Wenzler, Bloomington, and Fred Smith, Spencer, delegates and Joseph Milan, Bloomington, and Oran Kay, Spencer, alternates.

Parke-Vermillion

Dr. Dorothy B. Lauer, Dana, has been elected president of the Parke-Vermillion County Medical Society. Dr. Robert Fell, Rosedale, was elected secretary-treasurer. Speaker at the Dec. 19 meeting was Dr. William Bannon, Terre Haute, who spoke on "Medical Shock."

Pike

Dr. Milton H. Omstead has been re-elected president and secretary of the Pike County Medical Society.

Pulaski

Dr. E. L. Hollenberg, Winamac, has been elected president of the Pulaski County Medical Society. Dr. John D. Lacy, Medaryville, will serve as secretary-treasurer for 1963.

Rush

Elected new officers of the Rush County Medical Society are: Drs. W. H. Nutter, Rushville, president; Charles E. Sheets, Manilla, secretary-treasurer and Frank Green, Rushville, delegate.

Steuben

Dr. Norman W. Rausch has been elected president of the Steuben County Medical Society. Also elected at the Dec. 3 meeting were Drs. Richard W. Artz, secretary-treasurer; Donald G. Mason, delegate and Don F. Cameron, alternate. All of the new officers are from Angola. Speaker at the Dec. 3 meeting was Dr. Julian R. Kaufman who presented a demonstration of the "Depot" dose of allergen administration and preparation, with a discussion of its indications and limitations.

Sullivan

Twelve members of the Sullivan County Medical Society met Dec. 13 at the Sullivan Hotel. Field Secretary Robert Amick attended the meeting and reported on items of interest coming up in the 1963 General Assembly.

Tippecanoe

Dr. Forrest J. Babb, Stockwell, will be the 1963 president of the Tippecanoe County Medical Society. Other newly elected officers are Drs. Robert McAdams, Lafayette, vice-president; Robert C. Bolin, Lafayette, secretary and George M. Underwood, Lafayette, treasurer. Dr. Babb was elected delegate. Dr. Jack DeVault, medical consultant to the State Department, Washington, D. C., was the speaker. He showed a film on Africa.

Tipton

Field Secretary Howard Grindstaff met with the Tipton County Medical Society Dec. 12 at the Tipton County Hospital. Mr. Grindstaff discussed upcoming legislation with the seven members present.

Vigo

Dr. Stuart R. Combs has been elected president of the Vigo County Medical Society. Other newly-elected officers are Drs. Hubert T. Goodman, secretary-treasurer; Combs and R. Shirrell Rogers, delegates and Thomas J. Conway and James V. White, alternates. All of the new officers are from Terre Haute.

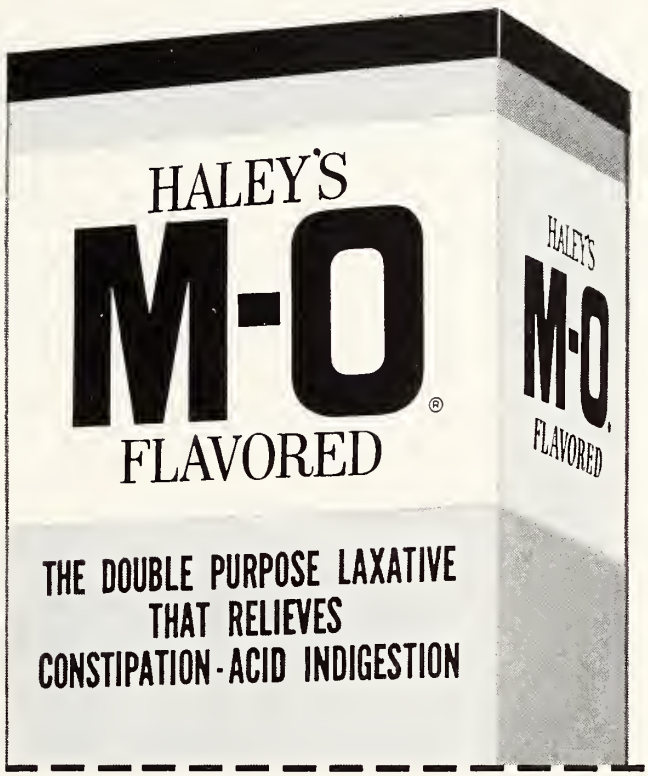
Wayne-Union

Dr. John E. Rayl, associate chief of staff at the VA Hospital in Lake City, Fla., spoke on "The Value of Bronchograms in the Evaluation of Bronchial Disease" at the Dec. 4 meeting of the Wayne-Union County Medical Society. There were 40 members present.

Whitley

"Newer Approaches to the Treatment of Allergies" was the topic of Dr. Julian Kaufman when he spoke at the Dec. 11 meeting of the Whitley County Medical Society. There were 24 members present. ◄

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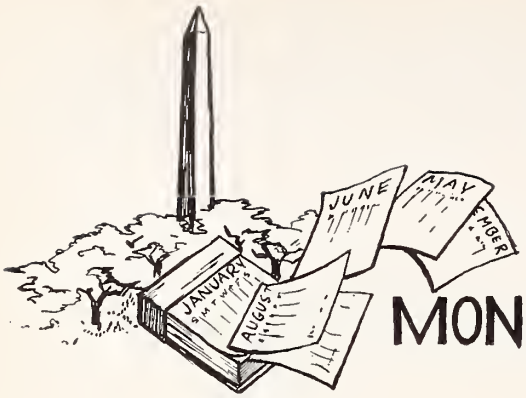
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This summary of what is happening in Washington is prepared by A.M.A.'s Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D. C.--President Kennedy submitted to Congress a proposed new multi-million dollar program to combat mental illness and mental retardation calling for the establishment of hundreds of community health centers.

The program would be financed jointly by the federal and state or local governments, similar to the Hill-Burton program for construction of hospitals. It was estimated the program would cost hundreds of millions of dollars eventually, if approved by Congress and fully implemented at the state and local level. Congress was asked to appropriate $31.3 million in fiscal 1964 for the program.

Kennedy listed three objectives: (1) determining the causes of mental illness and mental retardation and finding effective treatments for them; (2) research and training of skilled personnel; (3) strengthening and improvement of programs and facilities for treating the mentally afflicted.

"This approach is designed, in large measure, to use federal resources to stimulate state, local and private action," Kennedy said. "When carried out, reliance on the cold mercy of custodial isolation will be supplanted by the open warmth of community concern and capability. Emphasis on prevention, treatment and rehabilitation will be substituted for a desultory interest in confining patients in an institution to wither away."

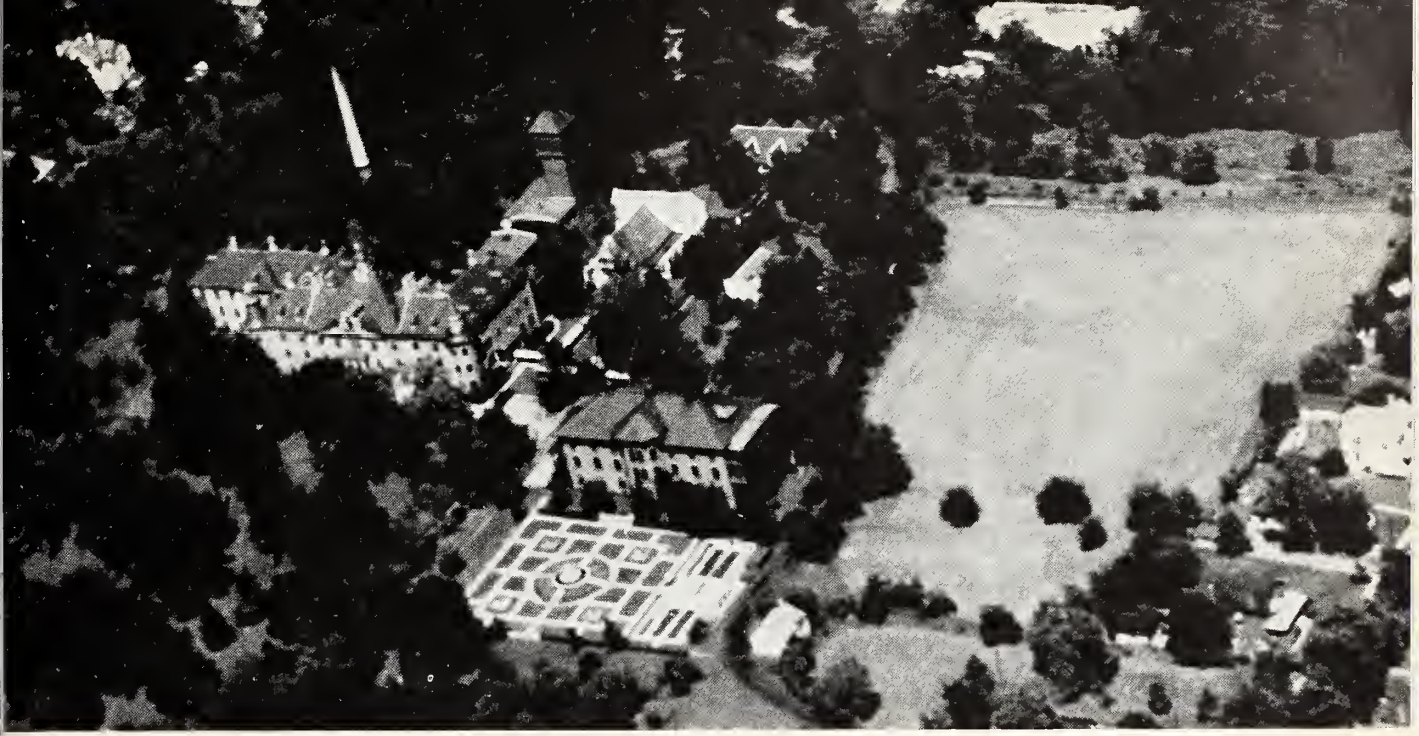
The President asked for prompt Congressional approval of legislation that would:

(1) Authorize grants to the states beginning in fiscal 1965 for establishment of comprehensive community mental health centers with the federal government providing from 45 to 75% of the project costs and short-term grants for initial staffing costs. The federal government would provide up to 75% of operation costs in early months and phase out such support in about four years.

(2) Set up a five-year program, starting with $5 million in the next fiscal year, for project grants to stimulate state and local health departments in planning, in initiating and developing programs. The goal would be prevention of mental retardation.

(3) Establish project grants to states to promote public planning for comprehensive state and community action on retardation, plus provision of federal funds for up to 75% of the construction costs of mental retardation research centers.

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(4) Amend the Vocational Rehabilitation Act to provide additional federal financial assistance for services to the mentally retarded and others whose vocational rehabilitation potential is difficult to determine. The legislation would permit rehabilitation services to a mentally retarded person up to 18 months.

BUDGET CALLS FOR 50% BOOST FOR MENTAL HEALTH WORK

The Kennedy Administration's budget for fiscal 1964 calls for increases for all activities of the National Institutes of Health with a boost of nearly 50%, to $166 million, for mental health work.

The estimated expenditures in the new budget for medical research through NIH totaled $850 million, $113 million more than the estimate for the current fiscal year. The total was somewhat surprising in that Kennedy expressed dissatisfaction last year when Congress appropriated $100 million more for NIH than he had requested.

In a special message to Congress "on improving American health," President Kennedy renewed requests for grants for medical and dental schools, air pollution control, health research, vocational rehabilitation, encouragement of group practice, improving maternal and child care and health and community health services.

The President also said there was a "clear and urgent need" for tighter control over the marketing of food, drugs, therapeutic devices and cosmetics.

Kennedy urged a five-year extension of the Hill-Burton Act providing federal aid for construction of health facilities, due to expire June 30, 1964. He asked an additional $35 million to provide financial assistance for modernizing or replacing hospitals and nursing homes under the law.

He said the need for "high quality" nursing homes would be "especially great" and urged an increase in the budget for such facilities from $20 million to $50 million annually.

The President asked Congress to adopt legislation to abate interstate air pollution along the lines of the existing water pollution control enforcement measures.

AMA SUPPORTS FEDERAL AID TO EDUCATION

The AMA again supported federal aid in construction, expansion and modernization of medical school facilities--"a one-time expenditure of federal funds . . . where the maximum freedom of the school from federal control is assured."

"If the high standards of medical education are to be maintained, increased attention must be given to the adequacy of physical facilities, the availability of qualified instructors and the availability of teaching material and patients for the clinical phases of medical education," Dr. Gerald D. Dorman, a member of the AMA Board of Trustees, told a House Committee.

"Any attempt to increase the number of medical students without regard to these conditions will result in a lowering of the standards of medical education. At this time, priority should be given, in our opin-

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ion, to an increase and improvement in the physical facilities available for medical education."

CANCER CURE CLAIMED BY MAKERS OF KREBIOZEN

The federal government is investigating cancer cure claims by the makers of krebiozen, and checking reports that the drug was being illegally sold.

The Food and Drug Administration set out to gather clinical records on patients who had been treated with the drug and who were reported to have been helped or cured by it. The FDA planned to try to evaluate whether krebiozen "has had any favorable influence in the treatment of cancer."

Commenting on quackery in the field of cancer in a statement at a hearing of the Senate Committee on Aging, Dr. Dorman said:

"A cancer product still being promoted at this time is 'krebiozen,' a product of extreme dilution, being one part of whatever the active ingredient is supposed to be to 100,000 parts of light mineral oil. This 'cure' sells for $9.50 for 1 cc ampule, which is about one-fifth of a teaspoonful. Competent micro-chemists have testified to their inability to find anything in an ampule of this product but the mineral oil."

An offer by Krebiozen Research Foundation, Chicago, to bring to Washington, patients it claims were cured of cancer by taking krebiozen was rejected by the Department of Health, Education and Welfare.

"The presentation of patients to give testimonials without any opportunity for further study of their complete medical records would contribute nothing at all toward solution of the scientific question of krebiozen's merit as an anti-cancer drug," Boisfeuillet Jones, Special Assistant to the HEW Secretary, said.

Dr. Robert E. Shank, chairman of the AMA Council on Foods and Nutrition told the Senate Committee on Aging that the vitamin industry is selling people pills they do not need.

"Perhaps the most lucrative deception in quackery is perpetrated by nearly every distributor of vitamins and vitamin-mineral supplements," he said. "Americans each year are spending hundreds of millions of dollars on (worthless or unnecessary) pills, powders, capsules and compounds in search of a shortcut to health." ◄



LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentation of opinions which appear on the editorial pages of the public press, and which are of interest to the medical profession. Its function is to review comments which may be favorable or unfavorable to medicine. Members are invited to submit editorial clippings for this column.

Spotting The "Battered Child"

Physicians have been taken to task by a Cincinnati radiologist for what he calls their general failure to deal with the legal aspect of "the battered child syndrome."

In the first place, says Dr. Frederic N. Silverman, most physicians have not learned to tell the cause of the trauma from their x-rays. Even if they do, he adds, MD's are reluctant to deal with it as a social problem.

But others must share the blame, Dr. Silverman pointed out in an American College of Radiology x-ray forum at the New York Academy of Sciences.

"Nonmedical groups—particularly social service agencies and branches of the judiciary concerned with children—are unfamiliar with the specificity of the x-ray findings and the serious prognostic medical and social implications," says the University of Cincinnati Medical School and Children's Hospital radiologist.

X-ray examination, he says, is the most effective means of detecting what the College of Radiology has termed "a blind spot" on the part of some physicians and social agencies.

"The bones of the child traumatized by his parents by design or unthinking rough handling," Dr. Silverman says, "often tell a story the child is too young or too frightened to tell."

Biggest aid to making the distinction between inflicted trauma and "normal" childhood accidents is x-ray evidence of fractures in various stages of healing, as well as their location.

Roentgen examination of the "battered child," he says, usually reveals irregular fragmentation of one or more metaphyses in the tubular bones associated with new bone formation external to the shaft.

The American College of Radiology is campaigning to make physicians more aware of parent-inflicted injuries to children. Along with the U. S. Children's Bureau, it is backing revision of state laws to provide more protection to children than under present statutes. One of the provisions of the suggested legislation would make trauma inflicted on children a "reportable disease." Only California physicians at present are required to report child abuse to officials.

Statistics on the number of battered child cases are vague but "for every child who is abused and enters a hospital there must be an additional hundred treated by unsuspecting doctors," says Dr. C. Henry Kempe, head of the pediatrics department at the University of Colorado School of Medicine.

His sample survey printed in the *Journal of the American Medical Association* asserts there were nearly 750 reported cases last year. Eighty of the victims died as a result of adult-inflicted injuries and 114 suffered permanent brain damage.—*Medical World News*, Feb. 1, 1963.

S-s-s-sh!

If participation in the Kerr-Mills program of old-age medical assistance had dropped last year, or even stood still, we can't help wondering what the Department of Health, Education and Welfare would have had to say about that in its roundup

Continued on page 286

Whatever happened to handkerchiefs?



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progress report on government help for the aged.

As it turned out, the 16-page HEW report devoted a single brief paragraph to Kerr-Mills, concentrating almost entirely on the point that average payments declined under the program. It avoided entirely the facts that the actual number of Kerr-Mills beneficiaries during the year ending last June more than doubled, from 46,247 to 101,634, and that monthly payments around the country in that period increased from $9,311,027 to $17,415,814.

Why? Well, according to Miss Ruth Lauder, a spokesman for the HEW staff, the omission of any reference to gains in the program was not deliberate. For one thing, she said, the report concentrated on newer and more dramatic programs—including, presumably, the President's bill for medical care for the aged through Social Security, which the report called the most important legislative proposal of 1962. And anyway, Miss Lauder added, the Kerr-Mills program is really an income maintenance program, which doesn't have anything to do with the health of old people, except indirectly.

This must be a surprise to those members of Congress who passed the Kerr-Mills program, who think it has not been given a fair shake, and who believe it is at least a partial answer to the administration bill. One who is not surprised, however, is Representative Byrnes, of Wisconsin, the ranking Republican member of the House Ways and Means Committee. Mr. Byrnes says the HEW has deliberately kept the program in a vacuum, that it has not only been dragging its feet on encouraging state participation in Kerr-Mills but has actually put stumbling blocks in the way of its success.

Whether that statement is accurate or not it is certainly true that the public at large has only the fuzziest idea about the Kerr-Mills program and how it is working. And from this viewpoint alone, the congressional investigation of the matter which Mr. Byrnes has advocated is clearly merited.—*Washington (D. C.) Evening Star,* Jan. 9, 1963.

Welfare Agency Tackles Medical Cost Issue

The president of the Vanderburgh County Medical Society recently made a statement that serves admirably as a backdrop for a meeting of his group and Welfare Department officials.

The two were scheduled to confer this Friday on fees for welfare patients. The president, Dr. J. D. McDonald, was quoted as remarking, "Times have changed from the time when hospitals used to provide free beds and doctors' free services on a charitable basis."

True enough. The hospital that provides charitable services must raise fees for other patients, in effect charging one invalid for another's care. The same applies to doctors. Furthermore, the burden of charity cases would inevitably fall upon the relatively few doctors who engage in general practice. The increasing number of specialists would be less concerned.

The basic fact behind the meeting on treatment of welfare patients is the same one that has prompted bitter Congressional debates. Medicine has made such progress that good treatment is now regarded as a necessity, rather than a luxury. But while it has prolonged life and reduced the time required to recover from illness or injury, it has become far more expensive than it used to be.

According to a Federal survey, private expenditures for medical care, including health insurance, represented 5.6% of disposable personal income in 1960, only 4% in 1948. Another study shows that even with this rapid growth in personal medical costs, public expenditures for health and medical services grew from $3.3 billion in 1950 to $6.2 billion in 1960. The doctors' decision to charge Vanderburgh County for each welfare case, rather than doing all of the work for a flat annual fee, is only a dramatic example of a nationwide cost trend.

In the new situation, there are many factors not covered by the old concept of the kindly family doctor charging in ac-

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cordance with a patient's ability to pay. The overworked general practitioner, treating an increasing number of patients and trying to keep abreast of rapid scientific change, cannot make this Robin Hood theory of medical economics workable.

The relationship of modern doctors to their patients and to organized society, as represented by welfare funds, insurance companies, and government agencies, is still undefined. A fair solution will demand flexible attitudes and imaginative thought by everyone concerned.

The conference on welfare fees, involving care for the needy by a government agency financed by a combination of Federal, state, and local funds, will be one test of our ability to make the adjustments that are needed.—*Evansville Courier Journal*, Dec. 27, 1962. ◄

From *The Journal* Fifty Years Ago

. . . The result of the recent attitude of the medical profession and the medical and public press, relative to Fourth of July noise makers, shows how the press and the public can be interested in an educational campaign. An editorial in the September 7, 1912, number of the *Journal of the American Medical Association* says:

"Bright innocent children, instead of being tortured, mutilated, blinded and burned to death as in former years, were this year preserved for their families and the world, save in a few instances. Instead of 5,623 persons injured, the number reported by *The Journal* in 1908, there were only 988; and instead of 466 killed, including 406 who were subjected to the agonizing tortures of lockjaw, as reported in *The Journal* in 1903, there were only 41 killed, including six tetanus victims.

"Instead of having a continuous struggle of from 24 to 72 hours against disastrous fires caused by the discharge of fireworks, this year the fire companies of our large cities, with a few exceptions, were practically idle. The forcing into bankruptcy of a few large fireworks factories in the last two or three years has been more than offset by the enormously increased sale of flags, bunting, banners and decorations."

The records show that some headway has been made in Indiana, in the education of the people about typhoid fever, yet not a single county was free from the disease last year. In ten years the death rate per 100,000 was decreased from 48.3 to 26.9.—Otis B. Nesbit, M.D., "The Defective School Child," *JISMA*, March, 1913.

The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 56 — March 1963 — Number 3

The Current Status of Treatment in Cerebral Vascular Disease

MARK DYKEN, M.D.*
Indianapolis

CEREBRAL VASCULAR DISEASE, as the third major cause of death in the United States and a crippler of almost two million living citizens, has properly attracted much attention in recent years.[1] Although the classical clinical findings are recognized, the underlying processes, natural history and specific preventive and therapeutic methods are still incompletely understood. Obviously, it would be impossible to review exhaustively the vast and oft times conflicting literature on this subject; therefore, representative papers covering present concepts will be summarized. Unfortunately there are many conflicting opinions concerning therapy, and treatment programs based on only a few articles or a few dozen articles which may be misleading. It would be difficult for the author not to impose some of his own prejudices on the reader, but an attempt will be made to present our current knowledge as factually as possible, permitting the reader to draw his own conclusions.

Clinically, cerebral vascular disease is divided into three major groups: (1) embolism, (2) thrombosis, and (3) hemorrhage. Thrombosis is probably a misnomer since controlled detailed pathological studies of cerebral infarction not due to embolism revealed no evidence of thrombosis in the intracranial vessels in over 60% of the cases.[2, 3] In this paper the more general title of "ischemia or ischemic infarction not due to embolism" will be substituted to describe this group.

* From the Department of Neurology, Indiana University Medical Center.

Cerebral Embolism

Cerebral embolism is usually secondary to extracranial disease. The diagnosis is based on evidence of sudden cerebral dysfunction in an area supplied by an artery derived from a source capable of producing emboli, and/or evidence of embolic phenomena in other areas of the body.[4] Cerebral embolism may occur in association with atrial fibrillation or other arrhythmias, myocardial infarction with mural thrombus, acute and subacute bacterial endocarditis, heart disease without arrhythmia or mural thrombus, cardiac surgical procedures, nonbacterial thrombotic endocardial vegetations, paradoxical embolism in congenital heart disease, atherosclerosis of aorta and carotid arteries, fragmentation of thrombi in cerebral arteries or in pulmonary veins, air emboli following trauma to lung or neck, or accompanying decom-

pression and fat emboli associated with fractures of marrow bones.[5]

The ideal treatment for this condition, insofar as practicable, is preventive. The primary condition should be treated in all cases. Although the causes of infarction may be different, the results of actual brain tissue death produce problems requiring similar treatment. Therefore, the specific treatment for the infarction of the brain will be discussed under the section dealing with ischemic infarction.

Ischemia and Ischemic Infarction

Cerebral infarction not due to embolism is usually associated with atherosclerosis of the cerebral vessels themselves or the extracranial carotid or vertebral arterial systems. Rarer causes of infarction are: cerebral venous thrombosis, trauma to great vessels in the neck, hematological disorders, dissecting aortic aneurysm, radioactive or x-ray radiation, collagen disease, meningovascular syphilis, and tentorial foramen magnum and subfalcial herniations.[6] Although these account for only a small fraction of cerebral infarctions,[7] they require consideration, for early definitive treatment of the primary disorder may result in dramatic recovery.[8, 9]

The well known clinical observation that symptoms and signs often subside spontaneously immediately following a clinical cerebral infarction, has opened this particular facet of cerebrovascular disease to a multitude of theoretical treatment possibilities and actual clinical trials. Some authors postulate that the original symptoms are predominantly secondary to cerebral edema in the vicinity of the infarct.[10] Others assume that a very small infarct in an area that has widespread activating facilitatory effects on neurones in neighboring or distant parts of the cortex may produce disproportionate impairment.[11] Still others think spasm of vessels in the region of the infarct causes widespread ischemia.[12, 13]

It has been demonstrated that transient signs and symptoms of infarction can occur due to temporary decrease in blood supply to an area of brain; function being temporarily disrupted without irrevocable damage.[14] The ischemia may be precipitated by a fall in blood pressure in an otherwise embarrassed circulation,[15, 16] or by hemorrhage into an atherosclerotic plaque decreasing the blood supply distally.[17, 18, 19] If the ischemic process ceases before damage becomes permanent there may be complete recovery. Clinically, this is most frequently observed in cases of carotid or basilar artery insufficiency where countless brief episodes of dysfunction may occur before, if ever, a permanent infarction results.[20–24] If the circulation is adequately re-established early in the ischemic episode, the attack may be aborted. Even when there is an area of irreparable damage, if edema and ischemia can be reduced and full circulation restored in the zones bordering this area, the degree and duration of ultimate dysfunction can be decreased.[25] Knowledge of these pathogenic mechanisms provides a simple theoretical background for discussion of the various specific therapies and the rationale for their use.

Drugs and Stellate Ganglion Blocks

Many drugs have been recommended for cerebral vascular insufficiency, the assumption being that they increased blood flow to the brain. Aminophylline, nitrites, iodides, Adrenalin, Benadryl, nicotinic acid, alcohol, papaverine, and histamine have all been suggested.[26] Cerebral blood flow measurements (according to the Kety-Schmidt nitrous oxide technic using the Fick principle) have shown that none of these drugs, with the exception of papaverine, increases cerebral blood flow.[27]

Bilateral stellate ganglion block has had many advocates in the past.[28–31] It was assumed that it alleviated cerebral vascular spasm. The concept of vasospasm as a major cause of cerebral vascular insufficiency has little valid support even though much has been written on this subject. Those patients diagnosed as having cerebral vascular spasm almost always show atherosclerosis at postmortem or upon cerebral angiography.[32] Even in normal healthy young adults the muscle component of cerebral arteries is much less than in systemic vessels of comparable size. If spasm were a major factor, it would more likely occur in this age group. No one de-

nies that spasm may occur in the larger vessels supplying the brain; yet it is improbable that it is a major cause of the "stroke" syndrome.[33]

Harmel and others have shown that bilateral stellate ganglion block does not change the cerebral blood flow as measured by the Kety-Schmidt nitrous oxide method.[34] Scheinberg repeated this study on patients who had suffered cerebral vascular accidents and also found no change in cerebral blood flow.[35] As far as I can ascertain there has not been a scientifically valid study with double blind controls which has shown that this procedure improves the prognosis for life or function in cerebral vascular disease.[36]

Carbon Dioxide

Cerebral blood flow measurements have demonstrated repeatedly that carbon dioxide causes the greatest increase in blood flow of any agent known.[37-39] A mixture of gases containing 5-7% carbon dioxide increases blood flow to the brain about two times the normal. This fact has stimulated much interest. Many reasoned that if carbon dioxide increased blood flow and the cause of cerebral infarction was decreased blood supply, carbon dioxide inhalation might be the treatment of choice.[40] A major defect in this reasoning is a failure to recognize that in an area of absent or decreased blood flow the carbon dioxide tension is already much higher than could possibly be created artificially.[41] Thus this naturally occurring increase in carbon dioxide tension would tend to benefit that area where it is needed most. The addition of 5-10% carbon dioxide by inhalation would affect the areas of brain where increased flow was not needed to the detriment of the diseased area. Carbon dioxide treatment was tested clinically by Millikan. Although this was not a random study, it did compare a treated group to a comparable untreated group; he found no significant difference in results between the two groups.[42]

Cortisone

The use of cortisone has been suggested in acute cerebral infarction in an attempt to decrease the surrounding area of edema. Excellent results were reported in an uncontrolled study.[43] Dyken and White, on the basis of a controlled study of cortisone treatment concluded that, under the conditions of the experiment, no benefit was derived from cortisone and there was a strong trend toward increased mortality in the treated group.[44]

Anticoagulants

Anticoagulants have been suggested in cerebral infarction whether the result of embolism or not. To evaluate this treatment it was necessary to categorize ischemic vascular processes more precisely, for specific syndromes reputedly have a more favorable response to anticoagulants than others. Wright and McDevitt have written a series of papers purporting to show the value of anticoagulants in embolism and thrombosis.[45-47] Millikan and the Mayo Clinic group have published many papers concerning anticoagulant treatment in various ischemic syndromes, carotid insufficiency, basilar insufficiency, infarction, and infarction in the distribution of the basilar arterial system.[48-50] They concluded that anticoagulants were beneficial in patients with insufficiencies without infarction and probably in insufficiencies of the basilar system, with or without infarction. Although well planned and expertly supervised, these studies unfortunately did not randomly select patients for the treated and untreated groups.

Because of the importance of this problem and the need to further evaluate this treatment, three randomized controlled studies were initiated (1) The National Institutes of Health study involving seven medical centers under the direction of C. Miller Fisher,[51, 52] (2) The study by John Marshall at the Institute of Neurology in London,[53, 54] and (3) the Veterans Administration Cooperative Study of Atherosclerosis involving nine Veterans Administration hospitals.[55]

Long-term Anticoagulation Not Effective

The National Institutes of Health group divided their patients into five categories: (1) Transient ischemic attacks, (2) thrombosis-in-evolution, (3) thrombosis, (4) cer-

ebral embolism, and (5) thorem (a group in which the differentiation between thrombosis and embolism could not be made with certainty). They concluded that there was an increase in mortality in all five groups treated with anticoagulants on a long term basis and no decrease in the number of ultimate infarctions or repeated infarctions. They did find that there was a decrease in the number of episodes of transient ischemic attacks and that there was possible benefit in the thrombosis-in-evolution group.

The Veterans Administration study placed patients into two groups of cerebrovascular disease. The first consisted of patients with transient cerebral ischemia where all or practically all of the neurologic manifestations subsided within 12 hours after onset. The second group was composed of patients who had had cerebral infarction. Within the major groups the patients were subdivided into those with one known episode and those with more than one known episode. They found that only 11% of patients with cerebrovascular disease were acceptable for anticoagulant therapy. Their conclusions were: "Although anticoagulation appeared to decrease the number of attacks of cerebral ischemia, there was no reduction in the incidence of new or recurrent strokes. A higher mortality rate was found in the treated patients, due in part to hemorrhagic complications. On the basis of the observations made thus far, long-term anticoagulation does not appear to be a practical or effective method of treatment for the majority of patients with cerebrovascular disease caused by atherosclerosis."

Marshall studied two groups. One was treated within 72 hours of the ictus; in the other, treatment was begun 14 days or more after the onset of the infarction. His conclusions were ". . . anticoagulants may be of value in two situations—the stroke-in-evolution and the recurrent transient ischemic attacks. But I do not think that we have as yet adequate evidence to prove this. I think that it is imperative that such evidence be obtained before we allow this treatment, which is not without hazard, expense and inconvenience, to become more widely used than it is already."

The conclusions derived from these studies are that *if* anticoagulants are of any value, it is when used on a short term basis for the stroke-in-evolution or for transient ischemic episodes so frequent as to seriously interfere with a patient's relationship to his environment; and only when the diagnosis is absolutely certain and there are no contraindications to the use of anticoagulants.

Surgery

Widespread interest has developed concerning the possibility of surgical treatment of atherosclerotic lesions in the extracranial portions of the carotid and vertebral arteries. Some authors report the results of surgical therapy in over 400 patients; others, in as few as one. Unfortunately all are merely skilled technical feats for, as yet, there have been no scientific attempts to objectively compare the results of surgery and pure maintenance therapy.[56-65] Many surgeons merely use re-establishment of the lumen of a diseased vessel and good blood flow at the time of operation as their criteria for successful treatment. To the present time no one has any scientifically valid information concerning the natural history of occlusive disease of the extracranial vasculature.[66] Many cases of a clinical stroke syndrome have been reported where there has been dramatic spontaneous recovery even in the presence of complete or partial occlusion of one or more major vessels as demonstrated by angiography or postmortem examination.[67-69] There have also been cases reported to show an excellent clinical recovery in response to surgical removal of a plaque; yet, when postoperative angiography was performed the artery that was operated upon was found to be completely occluded.[70-71]

Therefore, one can only postulate that the surgical procedure may improve the prognosis. Until a randomized study demonstrates a statistically valid difference between treated and control groups, the real value of surgical therapy must remain conjectural. At the present time this has not been done. A seemingly unappreciated as-

pect, unique to the brain and its vasculature, is the vulnerability of the neurone. Once a neurone dies it is not replaced, and its function is lost.[72] Once a patient experiences a completed infarction all that can be hoped for is prevention of further infarction. If therapy is initiated in the stages of insufficiency or very early after occlusion, before tissue death has occurred, it is conceivable that surgical re-establishment of the blood supply might avert permanent damage.

One case has been reported where cerebral angiography in 1950 demonstrated a definite plaque in the internal carotid artery. Approximately ten years later another angiogram revealed the plaque or narrowing to have disappeared.[73] This suggests the possibility that, in some instances, the basic atherosclerotic process may be spontaneously reversible, but this does not necessarily hold true for its effects. Toole demonstrated that in an otherwise normal vasculature, occlusion of one major vessel to the brain produced no ill effects. The flow in the other arteries was increased significantly so that the total blood supply of the brain was not seriously impaired.[74] Denny-Brown called attention to the fact that, with healthy vessels, it is almost impossible to produce cerebral infarction by occluding a major vessel to the brain.[75] Even when there are large plaques in the major vessels one cannot conclude that these are the only factors responsible for the patient's clinical findings. The presence of plaques in the great vessels supplying the brain of patients having no cerebral symptoms suggests that this condition need not necessarily cause symptoms even when part of a generalized disease process.[76-78]

A patient with complete occlusion of a carotid or basilar artery with the clinical manifestations of an apparent infarction will probably not benefit from surgery unless the procedure can restore circulation within a very short time after the onset of loss of function.[79, 80]

There are some excellent reports, even though uncontrolled, that suggest that surgery will ultimately have a place in treatment but only in very specific circumstances. Thus, surgery might be indicated in the case of a sudden infarction where angiography indicates occlusion of one of the surgically accessible vessels, if operation can be performed within hours of the onset. All one can now say is that even if it were possible to ream out every artery and arteriole from the arch of the aorta to the brain and completely restore the normal flow of blood, dead brain would not return to life.

Other than for these general statements, even the most ardent supporter of the surgical approach cannot scientifically or statistically state its exact place in the problem.

Fibrinolytic Agents

Fibrinolytic agents quite recently have gained much attention.[81-85] Their use is associated with considerable danger, and they should be used only by those familiar with them and with their complications.[86] Meyer et al. in a preliminary report on the use of plasmin with heparin indicated that this therapy may be of value. They are now in the process of making a randomized study concerning its value.[87] If this study supports the preliminary findings, fibrinolytic agents may be a valuable aid in treating cerebrovascular disease. No definite statements can be made at this time.

Supportive Therapy

Many forms of therapy have been mentioned in relation to cerebral ischemia and ischemic infarction. In each instance a critical review shows the therapy to be of no value or demonstrates that no definite conclusions can be reached because of insufficient objective data. Some day, well designed, scientifically sound research may indicate the proper forms of treatment. Until then we can only state that no specific proven therapeutic approach is currently known. Some of the therapies currently under study may ultimately prove to be effective.

In the meantime, vigorous supportive therapy can probably greatly reduce the mortality of cerebral infarction.[88, 89] Physical therapy can greatly increase the value of remaining function by establishing maxi-

mum usage.[90-93] Most patients with cerebral infarction who die after the acute episode, succumb from complications of bed rest and inability to handle secretions, e.g. genitourinary tract infections, pneumonia, thrombophlebitis, decubiti and intercurrent infection.

Such patients need intensive nursing care immediately following a major infarction. Rigorous adherence to good supportive therapy will be rewarded by decreased mortality and morbidity. The patient should be turned every two to three hours. Infections should be treated early and vigorously with antibiotic therapy. Aspiration of secretions and maintenance of a clear airway are extremely important.

The head of the bed should be elevated 30-40° and the patient's head turned to the side for better control of secretions. Patients who are incontinent or unable to void should have a catheter anchored. Bed clothes need to be kept dry to prevent skin ulcerations. Vital signs should be taken every two to three hours to detect complications at the very earliest.

Careful maintenance of fluid and electrolyte balance is mandatory. Intravenous feedings need to be supplemented by gavage feedings only when absolutely necessary and then in very small frequent increments. The quantity should be increased gradually and cautiously. It is preferable to give oral feedings as soon as possible. Passive physical therapy in bed must be started immediately to prevent fixation of joints. Active physical therapy is added as soon as the patient can cooperate.

Intracranial Hemorrhage

Intracranial hemorrhage can be divided into intracerebral and subarachnoid hemorrhage. Hemorrhage results from a variety of causes: blood dyscrasias, anticoagulant therapy, trauma, angiomas, aneurysms and hypertension are the most common.[94] Spontaneous subarachnoid hemmorrhage is most frequently secondary to a ruptured saccular aneurysm.[95] Intracerebral hemorrhage is most frequently associated with hypertension.[96-98] The current status of therapy in intracranial hemorrhage associated with hypertension and subarachnoid hemorrhage has still not been clarified conclusively.

The results in intracerebral hemorrhage are very discouraging however treated. Unfortunately a large percentage of these patients die no matter what is done for them.[99] Pilot studies have suggested that hypothermia[100] or hypotensive[101] treatment may decrease mortality rates. There is definitely a place for more investigation concerning these approaches.

A recent paper by Meyer and Bauer reported significant decreases in mortality in the hypertensive intracerebral hemorrhage group treated with hypotensive agents as compared with a control population.[115]

Evacuation of an intracerebral hematoma is definitely indicated if the patient survives the initial episode and the hematoma is large enough to cause actual mass compression or if it progresses.[102-105] The mortality rate is high during surgery but over 90% of the untreated patients die.[106]

Subarachnoid hemorrhage secondary to a ruptured aneurysm has been treated with hypothermia,[107] hypotensive agents,[108] and by various surgical approaches.[109-111] McKissock and his group have treated patients with aneurysms of the posterior communicating artery and the internal carotid artery to its bifurcation in a properly designed random fashion. They treated one group with common carotid artery ligation and the other with supportive medical treatment consisting of six weeks of bed rest. With this particular type of aneurysm, the surgically treated patients had a statistically lower mortality rate.[112, 113] The results of surgical treatment of aneurysms in other locations are not yet conclusive. The relative value of the various types of surgery, bed rest, hypotensive therapy, and hypothermia has not yet been compared in a randomized manner.

The National Institute of Health Cooperative Project on Intracranial Aneurysm and Subarachnoid Hemorrhage is now in the process of trying to set up a random study. If they are successful, the facts concerning these types of treatment may be available in the next few years.[114]

Summary

An attempt has been made to summarize some of the more important papers concerning cerebral vascular disease and its treatment. Various therapeutic approaches have been discussed some of which seem to be harmless, some definitely dangerous, and some of possible potential future value. The suggested treatments are extremely numerous, but the scientifically valid, well-designed experimental studies are rare.

The therapy of cerebral embolism is directed toward the primary condition, and therapy for the cerebral complications is similar to the treatment of infarction due to atherosclerosis.

The treatment of ischemia and infarction of the brain associated with atherosclerosis is still in dispute. The use of so-called vasodilating drugs, stellate ganglion block, carbon dioxide inhalation, and cortisone are probably of no value in light of experimental and clinical evidence. It has been shown that anticoagulants are of no value and are probably dangerous in all forms of ischemic vascular disease with the exception of transient ischemic episodes and thrombosis-in-evolution. Even in these two conditions, anticoagulants do not decrease subsequent infarction or mortality and are indicated only in special cases for a short time when there is no doubt as to the diagnosis and no contraindications to their use. Many large preliminary surgical studies report success in certain types of extracranial vascular disease. No controlled studies have been performed. We must await more scientific studies to adequately evaluate this approach. Not enough experience has been gained to evaluate fibrinolytic agents at this time. Vigorous supportive therapy is safe and its value has been demonstrated by long clinical use.

The results of therapy in intracerebral hemorrhage are very dismal. Hypothermia, hypotension and surgical therapy have been considered, but their proper use in this condition has not yet been established. Hypotensive therapy may significantly decrease mortality. Surgical intervention is indicated if the patient survives the initial episode and the cerebral hematoma is large enough to cause actual mass compression and progressive clinical signs.

Subarachnoid hemorrhage from an aneurysm of the posterior communicating artery or of the internal carotid to the bifurcation should be treated surgically. The value of surgical treatment of aneurysms in other locations is not yet established. Hypotension, hypothermia, and surgery are being studied objectively, and the treatment of choice may be known in the next few years.

Addendum

This paper was submitted in January, 1962. In the last year, additional papers have been published but none change the above concepts.

Editor's Note

Due to the extensive research work done by Dr. Dyken, his bibliography extended to such length that it was impossible to include his references. They will be included on his reprints. ◄

Retrograde Catheter Arteriography

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THE EXPERIENCE OF RECENT years has established retrograde catheter aortography and arteriography as a proven tool in the diagnosis of arterial disease as well as for the application of local chemotherapy to tumors. The demand for an early and definitive therapy of vascular occlusive disease makes a prompt diagnosis of this condition imperative.

Early attempts of roentgenographic diagnosis of vascular disease entities, particularly cerebrovascular accidents, were limited to the percutaneous insertion of needles into the main arterial supply. The questioned segment was then demonstrated by dye injection. While this method offered adequate diagnostic acumen in some regions, the method could not be extended to other areas because of the anatomical location of certain arteries.

Carotid arteriography for the demonstration of the intracerebral circulation remains an unsurpassed diagnostic tool. Translumbar arteriography is the method of choice for the demonstration of the region of the aortic bifurcation and in the diagnosis of entities such as Leriche syndrome.[4, 12, 21] Direct femoral arteriography by needle puncture offers excellent visualization of the peripheral arteries of the lower extremities.

Demonstration of the thoracic and abdominal aorta with its major radicals, however, is best rendered by catheter aortography.[13, 18, 20] A catheter introduced into the arterial system can easily be placed at the desired level and offers the advantage of selective engagement of many of the major arteries under investigation. The dye concentration of retrograde arteriography by far surpasses the concentration achievable with antegrade or venous arteriography.[19] Since we are frequently dealing with minute lesions and plaques, an adequate dye concentration has to be obtained to outline and contrast such minute abnormalities.

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Technic

Seldinger arteriography offers the great advantage of an easy percutaneous introduction of the catheter without a cumbersome arterial cut-down. An added advantage is the accessibility of the puncture site which allows observation and control of bleeding by external compression.[13, 18]

After local anesthesia of the puncture site is achieved by percutaneous infiltration with an anesthesia medium, a trilaminate needle (Ödman-Seldinger) is utilized for the percutaneous puncture of the femoral artery. (Figure 1) The innermost stilette of this needle is removed to ascertain an adequate intra-arterial position of the needle and check for arterial blood flow. After the second sheath has been removed, a wire with a highly flexible tip may be introduced into the artery through the remaining outer sheath. Subsequently the outer sheath of the needle is removed and a catheter may be advanced over the remaining indwelling wire which serves as a guide for the catheter. The guide wire may then be removed and the catheter advanced under fluoroscopic control to the desired level of the arterial system.

The tip of the catheter may be equipped with multiple side holes in addition to the end hole. If a fairly large segment is to be opacified homogeneously, multiple side holes are utilized to effect a more homogeneous injection. However, if engagement of one

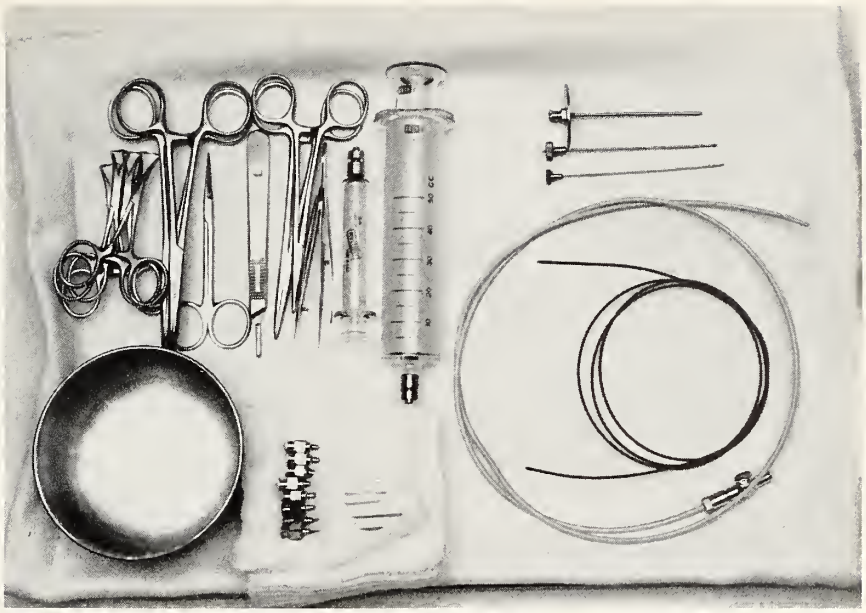


FIGURE 1
SURGICAL TRAY with Seldinger catheter, guide wire and Ödman needle used for percutaneous catheter arteriography.

specific artery is desired, an end hole catheter will be used. The tip of the catheter may be molded in a hook or spiral shaped fashion to facilitate engagement of the orifices of these arteries.

Manual injection of contrast medium is preferred if smaller arteries have been engaged, whereas pressure injection of large amounts of medium are used if the aorta or left ventricle is to be opacified. Manual injection or special perfusion pumps are utilized for the perfusion of tumors.

Single Film Exposure Feasible

Proper documentation of the arterial structures is best obtained on serial films, exposed in cassette changers. However, lacking such equipment, adequate information can often be obtained on a single film exposed at the critical time. Various phases of a certain structure should be scrutinized to properly diagnose the condition and this, of course, is most easily obtained by exposing multiple films at different times. However, for example, the capillary stain pattern, the nephrographic effect and the arterial phase of a renal arteriogram can be demonstrated simultaneously on a single film using a particular injection technic. A small amount of dye is gradually injected, to be followed by a bolus of the main amount of dye in a very rapid injection. The film is exposed at the end of the bolus-like injection. The preceding injection of a smaller amount of dye allows demonstration of the nephrographic effect of the kidney whereas the bolus injection terminating this procedure will demonstrate the arterial phase. Proper timing of the exposure of the film will, therefore, show both phases simultaneously. This should not belittle the many advantages that documentation on a serial changer offers in the diagnosis of these disease entities, but only points out that, in the absence of such equipment, a diagnostic study may be obtained in spite of such a shortcoming.

Retrograde Percutaneous Arteriography

The catheter introduced into the femoral artery in this fashion can be advanced to practically any point of the arterial system. The furthest point commonly examined by this technic is the left ventricle. The catheter passed through the aortic cusps into the left ventricle can be used for pressure recordings, collection of oxygenation samples and intracardiac injection of contrast medium. This technic is particularly useful in the demonstration of small left to right shunts through interventricular septal defects, incompetence of the mitral valve with resulting regurgitation of contrast medium into the left auricle and diagnosis of ob-

struction of the left ventricular outflow tract such as subaortic or aortic valvular stenosis.[3]

A catheter with its tip molded in a loop-like fashion is often used for the demonstration of both coronary arteries. The loop of the catheter with multiple side holes is positioned approximately half an inch above the coronary cusps and a single injection with 30 to 40 ccs. of contrast medium is used to flood both coronary cusps and fill the coronary arteries. An alternate technic utilizes a straight-tipped Seldinger catheter which is introduced directly into the coronary cusp. An injection of approximately 10 to 15 ccs. of contrast medium will suffice to demonstrate the respective coronary artery. (Figure 2) A selective engagement of the coronary artery may be attempted with a catheter equipped with a tapered tip, however, the catheter introduced through the femoral artery has the disadvantage of relatively poor control of its motion due to the long distance. The introduction of a catheter through the ulnar artery is therefore favored for the selective engagement of coronary arteries. This technic has gained wide popularity in recent years, particularly since the advent of coronary endarterectomy and the various revascularization procedures.[2, 6]



FIGURE 2

RIGHT CORONARY arteriagram with selective engagement af right coronary artery cusp by the catheter tip.

Procedure Possible on Heparinized Patients

One of the major applications of retrograde percutaneous aortography is the demonstration of the aortic arch and its major radicals. Carotid needle arteriography is an excellent method for the demonstration of the intracerebral circulation. However, this method often fails to demonstrate the common carotid arteries and particularly the origin of the carotid arteries from the aortic arch. Recent advances in vascular surgery, particularly grafting procedures and endarterectomy have shifted the treatment from the purely medical management to a possible surgical attack on lesions in the extracranial portion of the carotid artery. An early and accurate diagnosis of the level of the block or obstruction of the carotid artery has become obligatory to institute surgical management in the group amenable to these procedures. At the present time, the most satisfactory demonstration of the very origin of these vessels as well as the main part of the common and internal carotid arteries is by retrograde percutaneous arteriography. This procedure is carried out under local anesthesia; this is an important point in a patient who may have suffered a cerebrovascular accident in the recent past. The puncture site of the femoral artery is easily supervised and the procedure can even be carried out on patients who may have been heparinized because of recent cerebrovascular accidents. This offers an important advantage over other methods employing arteriotomy or direct needle puncture of the aortic arch where fatal bleeding into the thoracic cavity may occur in a heparinized patient.

The flushing injection technic of the aortic arch with a combined side and end hole catheter offers at the same time an excellent screening procedure for the patency of the vertebral arteries. A catheter with a spiral shaped tip facilitates engagement of the carotid and subclavian arteries and is used for the selective demonstration of the carotid and vertebral system.

This same method will also demonstrate the internal mammary arteries. Splaying or displacement of these structures is seen with involvement of the internal mammary

lymph node chain by tumor and may be used as an early criterion in the evaluation of the spread of breast carcinoma to these nodes.

Selective engagement of the subclavian artery is also used in the differentiation of the thoracic outlet syndrome such as the cervical rib syndrome, the scalenus anticus syndrome, the hyper-abduction syndrome, and the true thoracic outlet syndrome.[8] An extrinsic compression of the subclavian artery at certain characteristic anatomical sites and under the stress of certain maneuvers and positions is readily demonstrated on these contrast studies. (Figure 3)

Optional Positioning an Advantage

Percutaneous catheter aortography experienced its first and greatest popularity in renal arteriography.[7, 13, 16] The posterior position and origin of the renal arteries complicates their demonstration by translumbar aortography. The patient by necessity remains in a prone position and the dye tends to layer in the anterior gutter of the aorta. Catheter arteriography offers the great advantage of optional positioning of the patient in a supine position. The dye will then tend to layer in the posterior gutter of the aorta and excellent filling of the renal, suprarenal and lumbar arteries results. The basic advantage of easy supervision of the puncture site and control of bleeding by manual compression is a powerful point of persuasion to adopt this procedure. We know by experience that hematomas of 200 to 300 ccs. resulting from translumbar aortography are rather the rule than the exception.[10, 11] While this may not necessarily increase the mortality, it may occasionally lead to considerable complications as well as discomfort to the patient.

A combined side and end hole catheter may be utilized for a flushing injection demonstrating the right and left renal artery simultaneously. This method offers the advantage of an excellent demonstration of the orifices of the renal vessels which may be involved by arteriosclerotic changes. A selective engagement of each individual renal vessel with the tip of the curved catheter can be carried out and offers the advantage of a decreased dye injection. (Figure 4) However, plaques at the very orifice of the renal artery may frequently evade detection by this method. The major application of renal angiography has been in the diagnosis of hypertensive disease entities, however, renal tumors and tuberculosis as well as abscesses and cysts are likewise diagnosed by this method.

The diagnosis of renal lesions necessitates demonstration of both the arterial as well as the capillary and nephrographic phases. The arterial phase may show nar-



FIGURE 3
SELECTIVE LEFT subclavian arteriogram. Note excellent demonstration of vertebral and internal mammary artery.

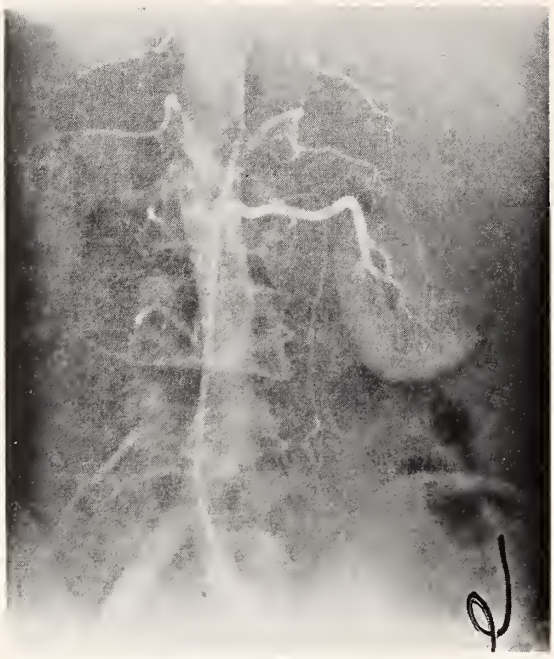


FIGURE 4

SELECTIVE DEMONSTRATION of a renal artery supplying the lower pole of the left kidney. Note capillary stain demarcating the area supplied by this vessel. Reflux into aorta is seen.

rowing of the artery at various points as well as splaying of the peripheral arteries around a space occupying lesion. The capillary phase is predominantly used in the diagnosis of renal tumors, where one can appreciate an abnormal giant capillary stain pattern in the region of the tumor. (Figure 5) The nephrographic phase will frequently suggest the presence of peripheral arterial disease in a segment or of the whole kidney, resulting in a decreased staining quality of a region or the whole kidney.

Suprarenal tumors and particularly chromaffine tumors are easily diagnosed because of the increased vascularity of these structures. However, the examiner should be cautioned that a hypertensive crisis may often be evoked by the injection of contrast medium into a chromaffine tumor, but can be leveled off to a safe pressure reading by the immediate injection of Regitine.[15, 20] A safer method of diagnosis is the retroperitoneal carbon dioxide insufflation. Other retroperitoneal tumors may, of course, be demonstrated in a similar fashion and are diagnosable by their abnormally large arteries leading to the tumors, splaying of the arteries around the tumor or a peculiar capillary tumor stain pattern.

A Versatile Diagnostic Tool

Seldinger arteriography is adaptable for the visualization of a large vessel supplying the visceral organs of the abdomen.[14, 20] Selective engagement of the superior mesenteric artery or the inferior mesenteric artery may be used in diagnosing mesenteric artery embolization or thrombosis. Relatively small amounts of dye are injected for this purpose because of the relatively poor tolerance of the bowel to injections of dye into its capillary bed. With increasing enthusiasm for embolectomy or early partial resection of bowel in these patients, this method has gained great favor in the last few years. Even local perfusion with vasodilators through an indwelling catheter has been advocated in cases of embolization.

Selective engagement of the celiac axis has gained popularity in the early diagnosis of carcinoma of the pancreas.[14] A fairly typical splaying of the normally tortuous splenic artery is demonstrated. Similarly there may be splaying of the pancreaticoduodenal branches. Similar changes, however, may be seen with cysts or pseudocysts of the pancreas.

The usefulness of arteriography for the proper staging and evaluation of bladder tumors has been pointed out recently.[9] Filling of the vesical artery may be achieved by either selective engagement of both hypogastric arteries, via right and left femoral artery catheterization, or by flushing injection of contrast medium immediately above the level of the bifurcation. Hitherto, staging of bladder tumors, of ultimate importance in the prognosis and selection of the type of therapy to be employed, has relied entirely on palpatory findings. (Jewett-Marshall classification) Arteriographic demonstration allows identification of abnormal vessels and determination of the extent of the lesion. Involvement of the muscular wall of the bladder, the fat capsule or the adjacent organs can easily be ascertained during the capillary phase following dye injection into the vesical arteries.

The demonstration of placenta praevia

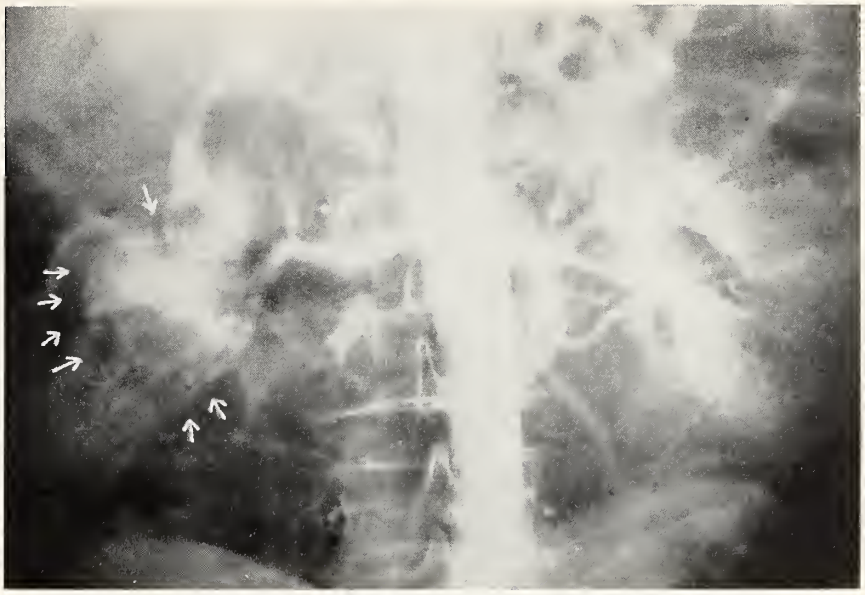


FIGURE 5
A HUGE TUMOR with marked hypervascularity of the right kidney is seen. Observe the dense stain of giant capillaries characteristic of a hypernephroma.

has long presented vexing problems to the clinician and radiologist. Soft tissue placentography has been an unreliable tool. Recent advances in isotope scanning technics allow a fairly accurate and satisfactory demonstration of the site of placental implantation.[5] This method also decreases the radiation exposure to both the fetus and the mother. However, while an excellent technic, its use is quite limited since only excellent scanning equipment is able to give the desired information. Engagement of the hypogastric artery by a catheter or flushing injection at the bifurcation level will readily demonstrate the implantation site of the placenta on a single film.[1] The technic is extremely simple and all necessary information can be obtained on a single film thus decreasing the radiation exposure to the fetus.

Retrograde Catheter Aortography as a Therapeutic Tool

The Seldinger catheter can also be used as a carrier of medication for tumor perfusion. The ability to selectively engage arteries feeding tumors allows a significant increase in the concentration of the chemotherapeutic agent delivered to the tumor bed. At the same time, the rest of the host tissue is largely spared the deleterious effect of the chemotherapeutic agent. Particularly agents detoxified during their first tissue barrier passage are advantageously employed in this type of therapy. This method is particularly applicable for the perfusion of retroperitoneal tumors and tumors of the pelvic organs. Satisfactory results have been reported in the perfusion of advanced stages of carcinoma of the cervix.

Complications

Retrograde catheter arteriography, if prudently performed, has a very low incidence rate of complications. The most common source of difficulty is undermining of a plaque covering the inside of a vessel in a shingle-like fashion by the advancing catheter. An attempt to disengage the catheter by flipping it may be undertaken, however, it should be borne in mind that application of force may result in lifting of the particular plaque and subintimal advancement of the catheter tip or even dislodgement of the plaque with resulting embolization in the distal arterial tree. A guide wire reinforced by the partially advanced catheter sheath is stiff enough to perforate large vessels. It is, therefore, imperative to remove the guide wire prior to the advancement of the catheter. It should be borne in mind that 5 to 10% of all patients are not amenable to this type of



FIGURE 6

FLUSHING TECHNIC type af injection demonstrating all majar branches af the abdaminal aorta.

examination because of advanced arteriosclerosis and the procedure should be terminated at an early time to avoid undue damage to the intima of the large vessels. Extensive arteriosclerotic plaque formation or partial occlusion of the large vessels is easily palpated as an obstruction meeting the advancing catheter.[7]

The dreaded complication of transverse myelitis secondary to injection of lumbar arteries or arteries supplying the spinal cord area is rarely seen with modern contrast media.[10, 11] Renal damage due to direct injection into the renal artery is likewise reported in the literature of the past 10 years. However, again this appears to be a phenomenon peculiar to some of the older contrast media rather than to the injection technic. Since the introduction of new contrast media renal necrosis has not been observed. Trauma to the intima of vessels by a rough catheter tip and subsequent thrombus formation and embolization of peripheral branches is an extremely rare complication.

In spite of careful preparation, an occasional subintimal injection may result. In the cases observed by the author, the patient sustaining a subintimal injection showed no increased morbidity or mortality.[7, 10] However, pain persisting for about 10 minutes was generally observed. As a safeguard against such a subintimal injection a test injection of approximately 2 ccs. of contrast medium is recommended. Even such a small amount will be recorded as intensive pain by the patient at the site of the subintimal injection and the catheter can then be readjusted before a diagnostic and massive dosage is injected. It is noteworthy to observe that arterial pressure transmission through the catheter does not safeguard against a subintimal injection since one or some of the side holes or the end hole may communicate with the free lumen of the aorta, allowing free blood flow whereas some of the other side holes or the end hole may be buried subintimally.

Local hematoma formation at the puncture site is easily detected and controlled by external manual pressure. This is a virtue not found in translumbar aortography where a massive hematoma of 500 to 1,000 ccs. of blood may completely evade detection.

Summary

A percutaneous retrograde catheter arteriography technic is described. Advantages of this procedure over needle aortography and arteriography as well as antegrade venous arteriography are pointed out. The applicability of this procedure for the demonstration of the left ventricle, the coronary arteries, the aortic arch and its major radicals, the renal arteries, large abdominal arteries, vesical artery and the placenta is illustrated. The method can also be used for tumor perfusion with antimetabolic agents. The relative safety and low incidence rate of complications are emphasized.

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The Trumpet Player And the Valsalva Maneuver

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A GREAT DEAL of interest has been shown recently concerning untoward reactions which are said to result from trumpet playing. Much of the current literature involving the subject has originated in England. Syncope and spontaneous pneumothorax have been described as acute accidents while emphysema and dental deformities have been noted as chronic ailments attributable to persons "afflicted" with the trumpet and similar brass instruments.

We recently had the opportunity to observe one of the so-called acute complications in a trumpet player and feel that the rarity of the incident justifies the following report.

A boy, 11 years of age, had played the trumpet for about 18 months. On November 27, 1961, he was practicing endurance, which involved sustaining notes for about 15 seconds moving up the scale in the low range of the instrument. After about 35 seconds, he suddenly developed dizziness, a fluttering sensation in the abdomen, nausea and "passed out" for a period of 2-3 minutes. Later, he perspired freely and appeared pale.

Recovery was quite rapid though fatigue persisted for a few hours. The boy was 57½" tall and weighed 92 lbs. The skin of the palms and soles was moist and cool, suggesting a mild neurocirculatory asthenia, yet the pulse at rest was strong and regular (84 beats per minute) and the blood pressure was 115/70 mm. of Hg.

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Playing Mechanism of Brass Instruments

Sound is produced by vibrations of the player's lips within a cup-like mouthpiece. Normally, the lips are gently approximated leading to a glottis-like action as they are forced apart by the flow of air. The corners of the mouth tighten or loosen in progression to upper or lower ranges of sound and act as the fulcrum in the control of constancy of tone; as well as the points of inspiration when periods of inhalation must, of necessity, be of short duration. Old-timers used the term "strong arm method" when the lips were tightly drawn across the mouthpiece and the performer appeared to have a snarl upon his face. This type of musician and the *cheek puffer* rarely became proficient instrumentalists.

The amount of air crossing the lips depends upon the intensity of expiration, upon the height or depth of the range being played, and upon the separation of the tones by the tip of the tongue acting as a valve as it strikes the back of the upper central incisors. Compression of the air column would then extend from the diaphragm to the teeth. Fixation of the glottis does not occur though the reaction in the suprahyoid musculature might give that impression.

Derbes and Kerr[1] have stressed the inaccuracy of the term Valsalva experiment (described in 1707) since the classic mechanism involved expiration against the closed mouth and nose for the purpose of discharging pus from the middle ear. Circulatory effects were not considered. The Weber experiment involved expiration

against a narrow glottis of such force as to produce cardiocirculatory effects. Oddly enough, Valsalva continues to take full credit for the caprice and in fact took full credit about a generation ago when it became a fad on the college campus. This was shortly after the live goldfish swallowing era.

An English authority[2] has commented upon the effects of the Valsalva maneuver: ". . . by producing a rise in intrathoracic pressure, causes an acute decrease in the effective filling pressure of the heart, with consequent changes in the stroke output . . . a decrease in pulse pressure occurs when intrathoracic pressure is raised, and this is followed by a phase of raised diastolic pressure (the overshoot)."

There is another effect, that of hyperventilation which has no relationship to the Valsalva maneuver. This has been described as "suffocation resulting from the weight of the column of air pressing too heavily on the lungs."[3] A sensation of giddiness would be a concomitant feature of such an experience and would result from varying degrees of alkalosis. The weight of the column of air would refer to the heaviness in the chest brought about by fatigue.

It is to be stressed that this is a common finding in the beginner and in the poorly trained student. The previously mentioned *cheek puffer* is a likely candidate for the hyperventilation syndrome since he manifests poor control of the instrument. Actually, swimmers and runners pressed to a point of great exertion would be more likely to have this sensation than brass instrument players.

The trumpet and the allied brass instruments are not dangerous in any sense. Students trained by teachers who know and understand the "brasses" would not be expected to ever experience deleterious effects. Syncope produced through the mechanism of the Valsalva maneuver can occur under a multitude of conditions but its incidence during the playing of a brass instrument is assuredly rare.

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Presented at the 40th annual meeting of the Committee on Trauma, American College of Surgeons, Indianapolis, Feb. 2, 1962

Football Head Injuries

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THERE HAS BEEN considerable interest and concern about the increasing number of serious and fatal injuries among football players. Trauma to the head is the leading cause of death in this sport. Three football players who received serious head injuries were seen at the Indiana University Medical Center during the 1961 season. Following a brief review of selected statistics on fatal football injuries, these three cases are reported, and some aspects of diagnosis and management are discussed.

Incidence

Since 1931, annual surveys of all types of fatalities associated with the game of football have been made by a Committee of the American Football Coaches Association, headed by Dr. Floyd R. Eastwood.[1] One might reasonably infer from this extensive compilation of data on football fatalities that the serious but non-fatal types of injuries follow a similar pattern of incidence.

In these surveys, football fatalities have been divided into those deaths due to contact injuries and into indirect deaths unassociated with body contact. Since 1931, an average of about 27 football players have died each year, some two-thirds of these deaths resulting from contact injuries. In Indiana, between 1931-1960, there were a total of 12 deaths, one college, two sandlot, and nine high school players.

Of the indirect fatalities attributed to football from 1931-1960, some two-thirds were due to heart failure and infection. Only about 4½% were of a neurosurgical nature, ruptured intracranial aneurysm heading this minority group. In contrast, the direct deaths due to body contact were usually surgical problems. Neurosurgical injuries accounted for 71% of the total number of direct deaths during this 29-year period. Injuries to the head caused death in 51%, and spinal cord injuries proved fatal in 20%.

When the contact deaths are analyzed annually from 1947, an additional trend is noted. The percentage of deaths due to abdominal and internal injuries have steadily decreased from 28% of the total number of contact deaths in 1947 to only 17% in 1960. In contrast, the neurosurgical contribution to the annual number of football fatalities has increased. Since 1955 there has been a progressive annual increase in the number of deaths from injuries of the head and neck from about 71% to a peak of 83%, in 1960, of all football deaths due to contact trauma.

Etiology

The etiology of the rising incidence of football head injuries is external trauma transmitted through the helmet to the skull and brain. Increasing numbers of heavier and quicker athletes, head up tackling and ball tackling are some of the recent factors in the sport that could contribute to the increased number of serious head injuries. These factors would provide for greater collision impacts and potentially more lethal types of injuries. However, the most widely held opinions suggest that the design and construction of the rigid plastic helmet,

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with its projecting face guard, unpadded occipital rim and inner sling suspension is deficient. This type of helmet may well serve to increase rather than decrease the likelihood of serious craniocerebral trauma, as well as cervical cord injuries.

Dr. George G. Snively and associates[2] have carried out impact-attenuation studies on most of the current types of football helmets. These helmets prove satisfactory in protecting the wearer from the effects of a blow at the crown or vertex. However, for blows on the front or rear edge or on either side of the plastic helmet, the helmet is rocked and the unpadded inner sling suspension allows the full force of the blow to be transmitted directly through the plastic shell to the skull and brain. This phenomenon has been called "bottoming." These and other similar promising preventive medical studies indicate that the use of a more protective, padded football helmet would substantially decrease the incidence of serious head injuries.

Pathology

In 1959, 14 of 18 deaths directly due to football were due to injuries of the brain or spinal cord.[3] Of ten fatal head injuries that year, autopsy studies were available in nine. These studies showed that the fatal intracranial lesions were usually complex with hemorrhage into and laceration of the brain. Although acute subdural hematomas were present in seven of nine autopsied cases, in only one case was the hematoma unassociated with concomitant traumatic intracerebral hemorrhage.

In 1960, ten of 12 football deaths due to neurosurgical injury were intracranial in nature.[1] Four of these ten deaths were largely due to cerebral or brain stem injuries with lacerations and hemorrhage. In at least three instances, the main cause of death was attributed to a subdural hematoma. Two deaths occurred from rupture of an intracranial aneurysm, in one instance precipitated by contact injury.

Case Reports

Case 1. Acute Subdural Hematoma. A 17-year-old youth was injured in a tackling pileup in a high school night football game in October, 1961. Initially he was not unconscious, but had difficulty walking. He complained of severe headache during the ten minutes after injury before he lost consciousness. When he arrived shortly thereafter at Indiana University Medical Center, he was neurologically intact except for continuing severe headaches. He was observed overnight and because he became progressively more lethargic, cerebral angiograms were performed. Angiograms suggested a left parietal subdural hematoma. The acute, liquid subdural hematoma was evacuated via multiple burr holes.

The patient made an uneventful recovery.

Case 2. Chronic Subdural Hematoma. A 25-year-old student sustained a brief cerebral concussion in early August, 1961, in a local professional football scrimmage. He had severe headaches over the next few weeks and developed double vision. When examined in October, his left pupil was noted to be somewhat larger than his right, although both reacted normally. He had papilledema bilaterally, more marked on the left side. A large, chronic, liquefied, subdural hematoma was drained from over his left cerebral hemisphere. His recovery was uneventful.

Case 3. Cerebral and Brain Stem Injury with Subacute Subdural Hematoma. This third example of a football head injury involved a 21-year-old college player. The patient was able to get up after his contact injury but collapsed after walking a few feet. Soon thereafter he had a convulsive seizure and lapsed into coma. On arrival at the hospital he was semicomatose, responding only to pain in reflex fashion. He had a partial paralysis of his right limbs. His temperature was 105.2, blood pressure 190/100, and pulse 92. Cerebral angiograms performed shortly after admission were normal. Tracheostomy was performed for relief of respiratory obstruction, and the patient was treated for a diffuse brain injury with intravenous urea and hypothermia.

Cerebral angiograms were repeated on the fifth hospital day in an effort to localize a surgical lesion. These were not diagnos-

tic, nor was an electroencephalogram. The presence of free fat in the urine and sputum on repeated occasions suggested the possibility of cerebral fat embolism despite the absence of fractures or pulmonary disease. On the eighth hospital day the patient's condition deteriorated further. Multiple burr holes were made and a small amount of subdural blood was evacuated from the right parietal area. On the tenth hospital day a pneumoencephalogram was performed. This showed a diffuse shift of the ventricular system from right to left. At craniotomy, a thin subdural collection of blood over the entire right hemisphere was removed. The patient postoperatively made a gradual recovery and was able to go home after one month, with only a slight neurologic deficit.

Comment

The first two cases were examples respectively of acute and chronic traumatic hemorrhage over the convexity of the cerebral hemispheres unassociated with direct damage to the brain substance itself. The third case presented evidence of a serious and complex injury of the brain including the brain stem, complicated by the development of a subacute subdural hematoma. The two cases of subdural hematomas were relatively easily diagnosed, by angiography in the first case and by clinical examination in the second case, to facilitate prompt surgical intervention. In the third case, angiography on two occasions was not diagnostic and in the presence of diffuse cerebral injury the existence of a slowly enlarging subdural hemorrhage was not immediately apparent.

Discussion

These three case reports and previous comments illustrate some of the diagnostic problems encountered in the clinical management of these patients. At the scene of the injury, in players who appear stunned or dazed or who have been briefly unconscious after body contact, the potentially surgical intracranial injury must be recognized and differentiated from the more frequent and ordinarily completely reversible manifestations of cerebral concussion. Severe and persistent headache, persistent lethargy or other alterations in the normal conscious state, or objective neurological abnormalities such as pupillary inequality and hemiparesis indicate the presence of a major intracranial injury requiring further investigation and treatment.

Once the individual with a serious head injury reaches a hospital, a diagnosis of a surgical or non-surgical lesion must be made, i.e. focal, accessible intracranial hemorrhage vs. cerebral contusion and edema. Occasionally, it is possible to arrive at such a differential diagnosis clinically and carry out the necessary surgical or conservative treatment. More frequently, however, a precise diagnosis can not be made without additional information.

An orthodox approach when the exact type of intracranial injury is uncertain is to carry out exploratory burr holes. When extracerebral hemorrhage is successfully located and evacuated by this approach the method has appeal. When exploratory burr holes are negative or disclose only cerebral edema, additional diagnostic information must be obtained by cerebral angiography or air studies.

In recent years, cerebral angiography has to some extent replaced exploratory burr holes as a method of providing a definitive diagnosis in patients with severe head injuries. Usually the patients' clinical condition will permit the additional hour or so needed for this contrast x-ray study. When positive, the surgeon can carry out a planned attack on the hematoma be it subdural, extradural or intracerebral.

As seen in the third case report, neither angiography on two occasions nor exploratory burr holes revealed the true extent of the subacute subdural hematoma. A pneumoencephalogram provided this information. Air studies, either via the lumbar route or by ventriculography are occasionally necessary to arrive at a correct diagnosis in certain types of acute head injuries. This is particularly true for the rare paradural or cerebellar hematomas in the posterior fossa. However, unlike cerebral angiography which is usually well tolerated by most individuals, cerebral air studies in themselves have a significant

mortality and morbidity, for example, after cerebral trauma when the intracranial pressure is elevated.

The desirability of additional diagnostic methods to localize intracranial hemorrhage at no risk to the patient has been recognized. Experience in the localization of intracranial hematomas by the injection of radioactive isotopes and external brain scanning has gradually increased. After intravenous injection of the radioisotope, the gamma rays emitted from the head are measured by lead-shielded crystals which move rectilinearly in automatic fashion so as to scan the entire head. Increased uptake of the radioisotope in an intracranial hematoma, as compared to areas of normal brain, gives rise to an increased counting rate and higher focal concentration over the hematoma. These abnormal concentrations are automatically recorded by mechanical stamping on paper or by photographic means, in their exact relationship to the skull.

Figure 1 illustrates the appearance of a right-sided subdural hematoma as diagnosed by a brain scan with radioactive arsenic.[4] This is a record of the net surplus of radioactivity emanating from the right and left sides of the head, picked up by paired detector crystals, one on either side of the head. If the radioactivity from the left side of the head equals that on the right, the net result would be an essentially blank record. The dense concentration of curved marks in the central portion of this lateral view indicates the precise location of the right-sided subdural hematoma. Had the lesion been left-sided, the markings would be straight rather than curved.

Additional studies are necessary to further develop useful technics employing radioactive isotopes as adjuncts to the neurosurgical diagnostic procedures currently available for the management of all types of intracranial hematomas, the posttraumatic, of which those caused by football are one variety, as well as hematomas of spontaneous origin.

Summary

Traumatic intracranial hemorrhage is the chief result of serious football injuries, the incidence of which promises to be lessened by technical improvements in helmet design. The case histories of three football players with serious head injuries and subdural hematomas are presented and discussed, with emphasis on methods of establishing a definitive diagnosis. The successful management of the hemorrhagic sequellae of a serious head injury is directly related to the successful localization and removal of any focal intracranial hematoma present. Reference is made to a technic of localizing intracranial blood clots by monitoring the head after injection of a radioactive isotope.

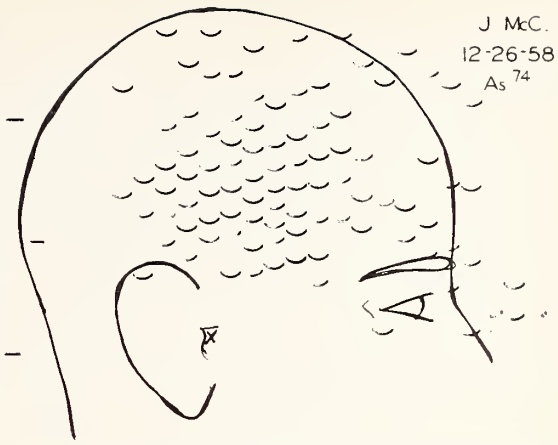


FIGURE 1

LATERAL SCAN of the head of a man with a right subdural hematoma, central in location, after intravenous injection of radioactive Arsenic-74.

Acknowledgment

The second case is presented with the kind permission of Dr. R. L. Campbell.

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The Case For Prophylactic Cholecystectomy In Cholelithiasis

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MOST PHYSICIANS AGREE that cholecystectomy is the treatment of choice in patients with proven cholelithiasis and typical symptoms. In these patients the operation can be performed with a low mortality rate and usually it effectively relieves complaints. There is considerably less agreement, however, on the treatment of the patient with gallstones who is asymptomatic or has mild or atypical symptoms. In such cases the benefits of cholecystectomy are less apparent and consistent.

There has accumulated in the literature sufficient data on the natural history of gallstones, the mortality of cholecystectomy and the effect of increasing age and geriatric disease upon mortality to suggest that cholecystectomy should be performed regardless of symptoms whenever cholelithiasis is diagnosed in the absence of a positive medical contraindication. Although symptomatic relief will be obtained in a significant percentage of these patients, the main reason for this approach is prophylactic.

In 1948, Comfort, Gray and Wilson[1] reported on 112 patients with gallstones that were an incidental finding at laparotomy performed for other reasons. Even on direct questioning postoperatively, no symptoms attributable to the gallbladder could be elicited. The average age was 48.2 years at the time of diagnosis. During the follow-up period of from 10 to 20 years, symptoms due to gallstones developed in 45.5% and were severe in 20%.

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More recently, Lund[2] reported a series of 526 patients observed from five to 20 years following the initial diagnosis of gallstone disease. Their symptoms at the time of the initial admission varied from none or slight to severe. Some of the latter had complications of jaundice or pancreatitis. There were 95 patients with only mild symptoms or none at all. Thirty percent of the men and over 50% of the women in this group developed severe symptoms and/or complications during the follow-up period. This development was even more common among the patients with more severe initial complaints. The five to 20 year outcome for the entire group is listed in Table I.

Mortality Rate Increases With Age

There were 14 deaths among Lund's patients, an overall mortality of 2.7%. The causes of death and time of death after initial admission are shown in Table II. This represents the minimum mortality of

Five to Twenty Year Outcome for Patients with Gallstone Disease*

	Men(119)	Women(359)
Asymptomatic or only slight symptoms	53%	36%
Frequent and/or severe attacks of pain	18	32
Complications	29	32
Operations for gallstones	19	27

* From Lund, *Annals of Surgery* 151:153, 1960.

TABLE I

Cause of Death in Gallstone Disease*

Cause	Number	Years After Initial Admission
Acute cholecystitis	5	1, 1, 9, 15, 16
Liver abscess (cholangitis)	2	2, 9
Necrotizing pancreatitis	2	4, 10
Gallbladder carcinoma	3	2, 2, 3
Gallstone ileus	1	7
Postoperative death	1	3

* From Lund, *Annals of Surgery* 151:153, 1960.

TABLE II

Minimum Mortality of Gallstone Disease*

Age	Number of Patients	Number of Deaths	Percentage
Under 46	150	0	0.0
46-55	123	1	0.8
56-65	128	4	3.1
Over 65	125	9	7.2
Total	526	14	2.7

* From Lund, *Annals of Surgery* 151:153, 1960.

TABLE III

cholelithiasis since a lifesaving cholecystectomy was successfully performed in a number of other patients.

Cholecystectomy is now the most common operation performed in patients over 65 years of age. The mortality from this operation, as from any other, increases with age because of associated disease. The effect of age upon the mortality in Lund's cases is shown in Table III. Becker, Powell, and Turner[3] reported that the mortality rate of acute cholecystitis in patients less than 60 years of age was 2% while in patients over the age of 60, it was 16%. Similarly, Glenn and Hays[4] found the mortality rate increased from 2.1% in patients from 50 to 64 years of age, to 10.9% in patients 65 years of age or over. Among patients in the same age groups with chronic cholecystitis, the mortality increased from 2.6% to 4.4%, respectively.

The presence of cardiovascular disease is a particularly significant factor in the increased mortality from surgery in advanced age groups. In 1959, Weiss and Weiss[5] reported on 50 patients with antecedent myocardial infarction who underwent 64 operations, both elective and emergency. There were six deaths—a mortality rate of 9.4%. In this group, cholecystectomy was the most common operation performed.

In 1960, Herron, Jesseph and Harkins[6] reported a mortality rate of 13.4% with extrahepatic biliary tract surgery in patients over the age of 70. Table IV indicates the incidence of cardiac disease and demonstrates the influence upon the mortality rate of emergency surgery compared to elective surgery.

The adverse effect of cardiovascular disease and emergency cholecystectomy performed with the patient in less than optimal condition, was further demonstrated by Glenn and Hays. Their results are listed in Table V.

Influence of Emergency Rather Than Elective Cholecystectomy and/or Common Duct Exploration in Patients Over 70 Years of Age*

	Number	Died	Mortality	Associated Cardiac Disease	Presence of Abnormal EKG
Elective	103	8	7.8%	48%	51%
Emergency	61	14	22.9	59	45.9

* From Herron, Jesseph, and Harkins: *Annals of Surgery* 152:686, 1960.

TABLE IV

Influence of Emergency Rather Than Elective Cholecystectomy in Patients Over 65 Years of Age*

	Mortality from Elective Surgery	Mortality from Emergency Surgery
No major disease	0%	5.8%
Hypertensive cardiovascular disease	1.5	10.8
Arteriosclerotic heart disease	5.5	8.8

* From Glenn and Hays: *Surgery, Gynecology and Obstetrics*, 100:11, 1955.

TABLE V

Elective Surgery Offers Minimum Risk

From these reported experiences it is evident that cholelithiasis, even though producing no symptoms or only slight symptoms when diagnosed, can produce symptoms and complications of sufficient severity to necessitate cholecystectomy in up to 50% of patients. Furthermore, the disease itself has a mortality rate of at least 2.7%. With advancing age the mortality rate not only of the disease but also of cholecystectomy increases.

The development of significant cardiovascular disease contributes to this increasing mortality rate. The effect of increasing age and incidence of cardiovascular disease, moreover, is accentuated by the necessity of performing cholecystectomy under emergency conditions. Disregard for these factors all too often culminates in a situation wherein a patient with cholelithiasis, who has previously been advised not to have a cholecystectomy because his symptoms were too mild or atypical or because he was too old, develops acute cholecystitis, obstructive choledocholithiasis or gallstone ileus and must undergo emergency surgery regardless of age and associated disease. He is then subjected to a risk that may exceed 20%. On the other hand, elective prophylactic cholecystectomy at the time of diagnosis of cholelithiasis would have permitted treatment with a risk of less than 2%.

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The Case of the Meek Matriach

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SHE LOOKED the typical "Yiddische Mommele" rhapsodically hailed by songsters such as Al Jolson and Eddie Cantor. The Bible has the lyric lines of stately grace in which Solomon sings in his 31st Proverb, "Who can find a virtuous woman? For her price is far above rubies. . . . Strength and honour are her clothing. . . . Her children arise up, and call her blessed. . . ."

In fact, Modesta Martinez was a pious Catholic of Puerto Rican extraction who had never seen a Jew until she migrated to New York. Whatever her race, religion or color, she was the unmistakable personification of the eternal mother holding the family together—the woman ever working, ever guiding the children, aiding the husband and ever pridefully goading the clan on to improve its lot. She was the linchpin in the axle as well as the duchess in the self-same carriage. New York is the world's capital precisely because so many millions have responded to the beckoning Statue of Liberty; multitudes of matriarchs have been the mortar cementing each family together.

Modesta first came to the outpatient department of our hospital. She had shortness of breath that had been worsening for the past month in spite of a spate of home remedies. Her condition had been diagnosed as ordinary arteriosclerotic cardiovascular disease plus a bit of asthma, probably cardiac but possibly pulmonary. Digitalization, aminophylline, iodides and antibiotics had not improved her condition so she was hospitalized for further studies and suitable therapy.

The afternoon of her admission, she had a bout of coughing succeeded by obvious cyanosis and near coma. The spasmodic, violent, non-productive, almost retching cough necessitated oxygen by mask, intravenous aminophylline and demerol and also a quick call for possible intubation. I was in the vicinity and was an observer of the sudden, dramatic ending: the patient bent forward, her breathing returned to normal and the cyanosis disappeared as promptly as it had started.

Laboratory Diagnosis Essential

Now the differential diagnosis of dyspnea as such, when discussed didactically, includes many things. First, we have the broad group of the *subjective* sensation versus the obvious *objective* sign of hurried breathing, unduly deep respirations and the exercise of the accessory muscles of respiration. There is great variability in the individual perception of increased

respiratory work. A pulmonary laboratory can measure quite accurately the amount of energy being expended in the effort to oxygenate the blood properly.

In the laboratory we can determine very precisely the degree of inadequate oxygen intake, carbon dioxide output and the relation of that ratio to the mechanical work being done. O_2 and CO_2 may become unbalanced without increase in the mechanical respiratory work. When air O_2 drops, as with increasing altitude, physical labor demands more O_2. If any kind of pulmonary dysfunction is present, cardiac efficiency is impaired, pathological blood changes develop or central nervous system disease exists.

The ratio of carbonic acid to acid bicarbonate has to be a 1:20 constant if the pH of the blood is to stay at an unvarying 7.35. Various reflexes such as the Hering-Breuer and the Churchill-Cope can be invoked, although I loathe eponyms. For the reflective student I would recommend a long look at the partial pressure curves of hemoglobin drawn on the same graph with those of reduced hemoglobin. The 18th edition of Ruch (the latest) displays this in Figure 470 on page 797. I am no mathematician, Heaven knows, but this curve puts me in mind of Einstein's famous remark, the "beautiful order of the Universe." Were the graph not precisely as it is—well, all life would be altogether different, indeed.

Without going into esoteric detail, the *clinical* aspects of dyspnea require careful observation and much less philosophizing. Just by standing and watching a patient we can differentiate, without too much palaver, the superficial, frequent respiration of pulmonary insufficiency from the cardiac insufficiency affected so dramatically by position and sleep. The periodic respiration of the Cheyne-Stokes type is known to every junior in medical school; the more subtle distinction between the deep breaths of oxygen deficit and ditto of acidosis (Kussmaul's) has to be observed many times to be really absorbed.

A hyperthyroid breathes rapidly and intensively merely because of a pathological need for excess oxygen. Dyspnea based on pulmonary dysfunction may be based on lung diseases with *restrictive* insufficiency, i.e., those in which the actual respiratory surface is restricted by numerous items such as effusions, fibrosis, atelectasis, pneumonia and many others. *Obstructive* insufficiency occurs when there is flow resistance as, classically, in bronchial asthma, emphysema, etc. In this day of gadgetry, we have laboratories where we can conduct beautiful precision tests such as Tiffeneau's (*there* is another eponym), pneumomanometry, vital capacity and all the refinements thereof. Auscultation, x-ray and above all —careful clinical observation enables one to arrive at a fairly reliable conclusion quickly and rather surely.

What is "Cork in the Bottle?"

With Modesta, there was really no need for an elaborate and detailed study. As I remarked to the resident touring the ward with me, we had been lucky enough to see the paroxysm terminate suddenly and spontaneously. What could produce such a dramatic effect? There *had* to be an obstruction: air entering the lungs had been blocked suddenly; just as suddenly, some change in position had released the constricting pressure. All that needed doing was discovering the cause of the cork in the bottle effect. Where, what and why?

During morning rounds the next day we had to cope, first, with the effects of overdigitalization. The E.K.G. was only too obvious, even to the short bursts of ventricular extrasystoles. The other routine studies were just that: routine. The blood picture was entirely normal as was the blood chemistry and urine. The only dissonant note was the potassium of 5.5 but we did not need that to warn us of the digitalis toxicity. The front view of the chest was unrevealing; the sputum showed nothing abnormal; both Pap smears and a search for TB proved negative.

After getting her out of the hypokalemic apathy, we had a chance to study her more at our leisure. The obstructive breathing was still present even if not so obtrusively obvious. She had been placed on the critical list so her family was free to see her at any time. Two of her daughters were doing just that even if the hour was very early,

indeed, I have the bad habit of touring the wards before breakfast. They were well-dressed, neat, well behaved people; the solicitude and respect being shown by them to their mother was much more than that usually seen in municipal wards.

At age 63, Modesta Martinez could be seen as a person commanding respect as a matter of course. She did not assume airs. She was modest, knew her station in life and was in complete rapport with her environment. Her English was good, even if spoken with a strong Spanish flavor; her voice was well-modulated and assured. She was very clean about her person; there was nary a trace of makeup on her face. Her hair was done simply with a sort of mantilla covering her head. The dentures were just that and worn without clacking ostentation or apology. She was sitting up in bed, calm and collected even if definitely dyspneic. The hands were toil worn, the fingers clean and clasped quietly on her lap.

Yes, for the last three months she had noted a "funny feeling" in her throat. She had gone to the neighborhood physician who had examined her with a head mirror and a laryngoscope. She was told that there was no visible abnormality; throat lozenges had been given on an empiric basis. She had also noted some difficulty in swallowing solids although liquids went down easily. She denied vigorously any prior illness whatever. Five children she had born and reared; that was in the natural course of marital events; otherwise, she had never had a sick day in her entire life.

A Choked Feeling

There was no anemia or weight loss. An entrance temperature of 101 had subsided within two days of admission but did call for comment. The cardiovascular system was quickly cleared of any guilt. The liver and spleen were normal and there were no ascites or even a hint of edema anywhere. Lying quietly in bed she seemed reasonably comfortable even though she continued to insist that she "felt choked—as if the air won't get into my lungs." Having seen the original paroxysm, I felt she could very well be close to the truth. *Something* was floating around the upper mediastinum that was exerting a ball valve effect on the trachea; it was our diagnostic duty to determine just what. Except when psychotic, dyspnea of her type indicates a disorder of consequence: diseases of the renal, cardiovascular and central nervous systems, diabetes, drug intoxications, acute and chronic infectious diseases of the respiratory system and lastly—but *never leastly*—intrinsic and extrinsic mediastinal tumors affecting the airways.

The fact of her being also definitely orthopneic in the absence of heart trouble made it more than likely that the "thing" growing in her chest had impinged on her trachea when lying flat and had floated loose as she sat upright during that stormy episode of choking already discussed. Granting that the dyspnea was not restrictive, i.e., not due to defects in the lungs or chest wall limiting expansion, we were narrowed to some obstructive factor decreasing the lumen of the tracheobronchial airways.

Mrs. Martinez was gone over carefully by the thoracic service resident; she was subjected to a bronchoscopy which was surprisingly unrevealing. Frankly, I was amazed to hear that they found nothing abnormal and that all the washings from the bronchi showed only a trifle more secretory activity than is normal.

Preliminary respiratory laboratory studies also showed only well functioning pulmonary alveoli and bronchi. Before doing an esophagoscopy a preliminary upper G.I. series was performed. The barium swallow resolved our perplexities with dramatic suddenness: "The esophogram shows an irregular filling defect of the middle third characteristic of a carcinoma of the esophagus. . . ." (Figure 1). We on the medical service were rather surprised as we had vivid recollections of that horrible choking attack; also, the lesion, so plainly delineated on the film, should have produced weight loss, anemia, dysphagia—quite a few other things. But there was that ominous shadow for all to see.

A Broken Taboo

The now surgical problem called for a cautious passage of the esophagoscope so



FIGURE 1

ESOPHOGRAM showing an irregular filling defect in the middle third of the mediastinum typical of carcinoma of the esophagus.

that the lesion could be inspected. I was peeking over the surgeon's shoulder as we surveyed the small, eroding, superficial ulcer: not at all the anticipated fungating mass. Pap smears of the scrapings taken from its surface revealed not a single neoplastic cell. Only local anesthesia was used as the patient lay there quietly submitting to the procedure. The senior surgical resident who was assisting the thoracic surgeon exclaimed, "Well! This cancer IS operable, don't you think, doctor?"

In his enthusiasm, the young man had forgotten that the patient could hear and comprehend! The words rang loudly in that quiet room; he was shushed pronto but the damage had been done. I could see the draped patient's figure flinch at that dread word, cancer! Always had I cautioned my students to NEVER blurt out that dread tiding so blatantly in front of or within the hearing of a patient. Just as autopsies and deaths are tabooed words when making ward rounds, so is cancer a prohibited term.

"New growth," "mitotic multiplicity"—other equivalents—but never the common, only too well-known, considered death-dooming appellation, *cancer*!

Never mind that the abashed young man had blushed at the sudden realization of what he had said! The damage had been irrevocably done. The patient was sent back to the ward; the formalities of transfer to the chest service were simple and accomplished quickly.

That same afternoon, two of Modesta's children sought me out; they were horribly upset at their mother's state of mind. Modesta was giving them instructions as to her burial—not if, but when. In minute detail she was apportioning her worldly goods and she asked to have the priest see her that very evening. She seemed perfectly calm and in possession of her faculties but totally resigned; there was no fight left in her. Was the prognosis of the scheduled surgery *that* bad? Was it really a cancer? Should they take her to a private hospital and call in some renowned specialist? They did not have much money but, for their mother, they would scrape together—borrow. The children then told me that Modesta had had two very bad experiences nursing hopeless cancers. Her own Godmother had died agonizingly of a fungating breast growth; a near neighbor and old-time friend from the home village had been nursed by Mrs. Martinez while he was dissolving from the effects of a stomach cancer.

My reassurances to the children were the best that I could muster. I did make it my business to drop in on the unfortunate woman. She had been on my service for a mere week and yet I felt a real responsibility toward her for the verbal enthusiasm of the exclamation made by the resident in her hearing. I do not pretend to claim that I took such a minute interest in *all* patients coming on the medical ward. Yet her personality attracted attention and I was not—emphatically not—satisfied with the roentgenologist's "open and shut" diagnosis. The shadow on the film *did* look as stated; still, we did not have a lateral view of the mediastinum (film lost and not retaken) and, above all, the clinical picture just did not jell: I could not put my finger on my reasons but there they were! And I was posi-

tive that someone (me) had to go to the poor woman and ease the shock of the horrifying word, cancer. Any tactful and misty explanation would do as long as even a flickering gleam of HOPE was spelled out.

The day was a Friday; she had already been scheduled for surgery on Monday morning. First, I had gone to the pathologist and we had both gone over the Papanicolau smears. Neither in the bronchoscopy washings nor in the material from the esophageal ulcer was there as much as a solitary suspicious cell. And why was her state of nutrition so good? And why that paroxysm of dyspnea? And the persisting orthopnea? More time was consumed than I had anticipated; when I got to the chest ward, the priest was already at her bedside. I could not intrude but left telling the charge nurse to tell the patient that I expected to see her the next day.



Tracheotomy Tube Brings Relief

Late the following afternoon, the surgical resident and I were on the ward on another mission. We were passing by Mrs. Martinez's bed and I was going to tell her that I would return for a chat very soon. Both of us were quite startled to see the good woman sitting bolt upright in bed; she was panting, nay wheezing as if being strangled—she was cyanotic! To our solicitous query, she managed to gasp out, in staccato heaves, that she had somehow turned wrong in bed and for the last ten minutes had felt just as she had the day I first saw her. The intubation set is always available for just such emergencies. The anesthesiologist was on the floor and the tube slipped in smoothly all the way past the constricting pressure point. In a couple of minutes more, Modesta was breathing normally—really normally, for the first time since her admission to our hospital!

The patient's eyes shone with the gratitude that the almost strangled and then completely relieved person can feel. The anesthesiologist left with the solemn warning to the patient not to touch the carefully taped life-giving airway. Having completed an emergency consultation on the other case I had come to see, I returned to Modesta's bed. I pulled up a chair and we talked—or rather there was a monologue by me with a captive audience. Modesta could gesture but that slim tube in her throat was an effective bar to her speech. I did not tell her that the priest had talked to me that day. Of course, he had not violated the secrecy of the confessional; still, he had been disturbed by the tenor of Mrs. Martinez's thinking. He had reiterated that suicide was a mortal sin, he had pleaded with her to accept God's will. He had come to me suggesting that I also talk with her to bolster her morale for the coming ordeal.

Having talked with the Martinez children and being aware of her utter panic at the very thought of cancer, I launched into conversation by telling her that as a matter of course we had considered the possibility of new growth. Bluntly I used the word cancer, but then I went into all the reasons why this seemed most unlikely. "Of course, we never can tell for sure but I can tell you most truthfully, Mrs. Martinez, that we searched with a microscope all day and did not find a single speck of cancer." On that hope-creating theme, I waxed positively eloquent.

In considerable detail, I elaborated my

own thoughts arguing against a tumor. I emphasized the total absence of any signs of metastases, her general good health, the unusual nature of her obstructive dyspnea; never had I seen a tumor do what I saw in her case. I was *SURE*—absolutely certain—that surgery would prove simple, positively curative and that she would have an uneventful recovery. Very craftily, I avoided all mention of the damning x-ray film—and she could not ask about that in her mute state. Finally, I inveighed against her even thinking of suicide, warned her to guard the airway and bade her a hearty good luck. On the way out, I repeated to the charge nurse to watch the intubation tube and to please pass the warning along.

"Let Her Own Works Praise Her . . . "

Late Sunday evening, I made it my business to pass by Modesta's bed. The priest had told me that morning that he had been to see the patient. She was in mortal fear of the operation and her scrawled note told of even greater dread of surviving that ordeal only to be exposed to the tortures of a fatal neoplasm. We both were worried by the patient's obsession with her impending death. She nodded a friendly greeting; she seemed relaxed—or had she made up her mind on a course of action? Was she resigned to her fate and accepting surgery —or had she decided on something irrevocably drastic? I talked to her a bit, as gently and as cheerfully as I could; confidence just oozed out of me. Nevertheless, I warned the supervising nurse to watch the patient constantly; if at all possible, I asked that a special nurse be sought for the night shift. More than that was beyond my power.

The schedule called for Mrs. Martinez to get her pre-operative medication at 6 a.m. and to be taken upstairs at 6:30. She received the injection in routine fashion; the special nurse went to help the orderly with the stretcher that was in the aisle; in the intervening few seconds there were no eyes on Mrs. Martinez. No one saw her remove the tube from her throat. Both the orderly and the nurse saw the patient lying quietly in bed; tightly clasped in her right hand was the life-giving airway. When had she managed to loosen the adhesive tapes? She was still conscious and restraining all convulsive efforts to breathe—will power? Before anything could be attempted, Modesta was dead of suffocation. Efforts at resuscitation were entirely futile. Her features in death were quite composed; to her last conscious moment the meek matriarch had maintained an incredible control over the frailties of the body. She was at peace with the world and with God.

The Cork Is Drawn—Too Late

I quote from the autopsy report. "Ovoid tumor, 9 cm. in diameter, gave a saccular widening at the upper mediastinum. The capsule was thin-walled; on cut surface, the parenchyma showed a mottled grey-brown tumor. . . . Pressure was exerted on the esophagus in its mid third . . . the tumor was extending and replacing portions of the muscle layers . . . there was a superficial erosion of the esophageal mucosa."

The final diagnosis was "Spindle and giant cell liposarcoma, grade one malignancy, with mechanical compression of the esophagus and trachea." There were no metastases and the local extension was minimal. It would have been a most simple piece of surgical routine to excise the entire mass. Prognosis for full recovery would have been excellent.

The roentgenologist was shown the tissues and was reminded of his unequivocal diagnosis. He is a good man; very quietly,



he took the dead woman's x-ray folder and scribbled on its outside, "mediastinal tumor, no esophageal involvement, no lung involvement." He thanked me for calling his attention to the event. I hold the folder in my hand even as I type; I had removed it from his teaching file. A little slip of white paper says in the good doctor's own handwriting, "mediastinal tumor extrinsic in relation to the esophagus."

The overly loquacious surgical resident had been present at the post mortem. To reprimand him then would have been cruel; he had learned his lesson.

All this subjunctive speculation does nothing to alter the hard reality of needless death. Meek Matriarch! Woman of Virtue! Strength and Honour Are Her Clothing! Her Children Call Her Blessed!

Across the millenia that 31st chapter of Solomon's Proverbs still reverberates its beautiful lyric. . . . ◄

1270 Fifth Ave.,
New York, N.Y.

Telephoned Narcotics

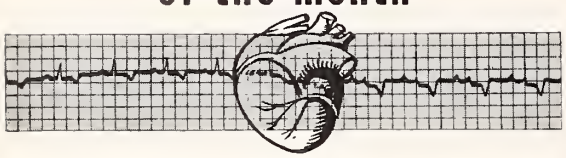
Both the state and Federal narcotic laws allow a pharmacist to take class "B" narcotics over the telephone.

Neither law permits you to take a class "A" narcotic (addictable drugs) over the telephone. You may, under the Federal law take such a prescription over the telephone and deliver it to the patient, provided the original, signed prescription is handed over to you prior to the delivery. There are no other exceptions.

If, during an investigation, your prescription files show a number of prescriptions on a pharmacy prescription blank, written or typed, then signed by the physician, the investigating agency may conclude that these class "A" narcotics were taken by phone, filled, delivered and the prescription mailed to the physician for his signature. We again call to your attention that such a procedure is illegal. A signed original prescription must be in your hand before you fill it for class "A" narcotics.

You as a pharmacist have the sole responsibility for purchasing, storing and dispensing narcotics. Please don't abuse this privilege for the convenience of anyone.—Reprinted from *The Indiana Pharmacist,* September, 1962.

Electrocardiogram of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Krannert Heart Research Institute, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

Supraventricular Arrhythmias

CHARLES FISCH, M.D.

THE CONCEPT that atrial fibrillation and flutter result from a circus movement about a well defined pathway in the atrium and that atrial premature beats and atrial tachycardia are due to a rapid discharge from a single focus has been accepted by the vast majority of workers in the field of cardiac arrhythmias.

Printzmetal, however, has put forth some rather convincing evidence that atrial fibrillation and flutter may also originate from a single rapidly discharging ectopic focus. The present consensus of opinion is that both mechanisms, the circus movement and unifocal discharge, are probably responsible for atrial fibrillation and flutter at different times in different individuals.

The occasional presence of the different atrial arrhythmias in a single tracing emphasizes their close relationship and supports a unifocal origin in the arrhythmias in the given instance. Figure 1 is an example of such a record. The upper two strips and first portion of the third strip show classical atrial fibrillation with absence of the P waves, presence of F waves and irregular ventricular response.

Normal sinus rhythm, as evidenced by a regular sequence of P-QRS complexes is recorded in the right half of the third strip. A clearly identifiable atrial premature interrupts the normal sinus rhythm. The first part of the bottom strip shows an atrial flutter with a 2:1 response which then terminates in atrial fibrillation. ◄

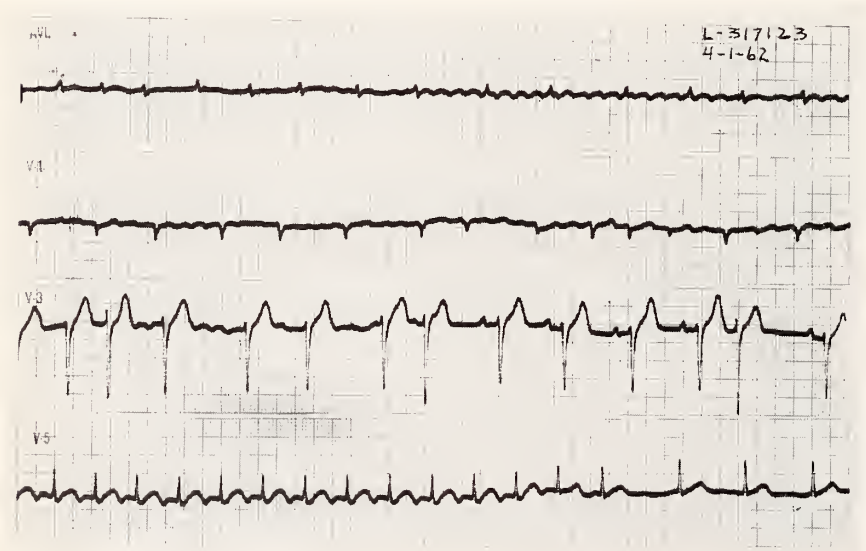


FIGURE 1

NOTE THE PRESENCE of atrial fibrillation in upper two strips, normal sinus rhythm and atrial prematures in third strip and atrial flutter in bottom part of the tracing.

X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

A Simple Arteriographic Technic For Placentography

ERICH K. LANG, M.D.*
WILLIAM M. ANSHUTZ, M.D.†
Indianapolis

THIS 26-YEAR-OLD white multipara presented in her eighth month of pregnancy a complaint of vaginal spotting and bleeding. Over the past three days, the spotting had increased to profuse bleeding. The presence of a placenta praevia was suspected. The roentgenogram demonstrates the arterial phase of the injection and shows the location of the placenta along the lateral wall of the uterus. This represents a somewhat low implantation, however, it is definitely ascertained that one is not dealing with a total or partial placenta praevia.

An accurate and reliable diagnostic test for placenta praevia is a necessity to determine the clinical management of these patients presenting with a history of bleeding during the last trimester. Soft tissue technic films of the abdomen have been advocated hoping to demonstrate the site of placental implantation. This technic has been rather disappointing. Placentography by arteriographic demonstration is an extremely simple and reliable method.

Method

Placentography may be carried out with a retrograde needle injection into the femoral artery or injection through a percutaneously placed polyethylene catheter. An arterial puncture is carried out with an 18-gauge needle. A tourniquet is applied distal to the needle puncture. The femoral artery is best punctured immediately below Poupart's ligament. Approximately 20 ccs. of 50% Hypaque is injected in a retrograde fashion, and a single film is exposed three to four seconds after completion of the retrograde injection.

An alternate method introduces a small polyethylene catheter into the femoral artery. A percutaneous needle puncture with introduction of a guide wire facilitates the introduction of the catheter in a percutaneous fashion. The catheter is then advanced approximately 20cms. to about the level of the bifurcation or at least above the hypogastric artery origin. An injection of approximately 20ccs. of contrast medium suffices for adequate visualization and opacification of the placenta. The film is again obtained approximately four seconds after completion of the injection. Either method delivers an adequate amount of dye into the hypogastric arteries and the uterine arteries.

Demonstration of the placenta is definite and misinterpretation of soft tissue shadows such as may occur with soft tissue roentgenography is excluded. No untoward

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† From the Radiology Department, Methodist Hospital, Indianapolis.



CONTRAST visualization of the orteriol phase of the plocenta showing its locolizotion.

effects of a femoral artery puncture or the dye injection have been observed. The entire procedure can be carried out in a minimum amount of time, usually less than 10 minutes. The dosage (roentgens) delivered to the fetus and to the maternal genital organs is less than that delivered with a single roentgenogram for soft tissue roentgenography. Even patients in labor are amenable to this examination. ◄

The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

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The Story of Accidental Poisonings—A Series of "Fives"

POISON PREVENTION WEEK is being observed March 17 to 23.

The seriousness of the accidental poisoning problem can be told by a series of "fives." About 500 children under the age of five die each year from this cause and such accidents involve 500,000 children annually.

The cure for the trouble consists of thorough public education. If all adults who have custody of toxic substances (and who doesn't?) were sufficiently aware of the dangers, accidental poisoning of children could be eliminated.

There are a multitude of poisons that are used around the modern home. Most of these are of recent origin and it would be natural to suppose that the newer poisons are the biggest offenders. Not so, aspirin and kerosene are still by far and away the most frequent killers.

Be that as it may, if it is possible to sensitize people to the importance of safeguarding all medicines and all toxic household substances from children, much loss of life, many illnesses and many heartbreaks will be prevented.

Four classes of products are most often involved. These are (1) internal medicines, of which aspirin is the champion; (2) cleaning and polishing agents; (3) pesticides; and (4) petroleum distillate products such as kerosene.

Accidents are due to storage of poisons where children can reach them or to the improper care of the substances when they are used or when they are discarded. Keeping a liquid poison such as kerosene in a food container such as a milk bottle or soft drink bottle is one of the pitfalls. Discarding a hazardous substance so that children have access to it is another.

Each year sees a better and more extensive organization for the vast public education campaign which will be necessary. Poison Control Centers are essential in the treatment of poisonings, but the enlightenment of the public is the vital step which will control the problem.

The National Planning Council is made up of twenty organizational and governmental units. The AMA, the Hospital Association, the American Pharmaceutical Association, the National Safety Council,

the American Red Cross and the National Association of Retail Druggists are some of the members.

This year the Planning Council and most of its members are promoting the informational campaign. The Indiana Pharmaceutical Association is distributing through retail druggists in three Indiana counties a single sheet of antidotes listed for quick and easy reference. This home reference sheet is titled "Counterdoses for the Home" and will be given away free.

The Pharmaceutical Association also is furthering the distribution through retail drug stores of a 16-page Poison Prevention —First Aid—Home Safety Guide. This is inscribed "Presented by your pharmacist as a public service."

The Public Health Service and various other entities have instructional brochures, pamphlets, slide sets and movies to use now and at any time of the year for the furtherance of "freedom from poisons." A list of these materials may be obtained by addressing the Poison Control Center, Indiana State Board of Health.

The Fellowship for Freedom in Medicine

WE ARE ALL ENGAGED in the battle for freedom in Medicine. This battle must be won if medicine is to continue to progress and to provide this nation with the finest medical care in the world.

Our British colleagues have found, through bitter experience, that socialized medicine is the greatest deterrent to the practice and advancement of medicine. It renders the doctor quite unable to give the seriously ill patient the care that is due . . . carrying a large patient load, prescribed for him by the government, according to the locale in which he practices . . . much of his valuable time is consumed by patients with no more serious complaint than a common cold or a headache. But, because the visit to the doctor is free, the patients come.

After all, with the doctor's prescription they can buy a bottle of aspirin for only seven cents, without the visit to the doctor the same tablets would cost them 35 cents. Added to this the doctor, under this National Health Service, must complete reams of government forms to justify the prescriptions written from, of course, an approved list of drugs. For all this work he receives less remuneration than a crane operator or truck driver.

In 1948 the late Lord Horder foresaw the threat posed to the high standards of British Medicine by the British Medical Association's acceptance, under political pressure, of the terms of service offered by the National Health Service. To help ward off this threat, the Fellowship for Freedom was formed, Lord Horder assuming the position of leader. The aims of the Fellowship are:

- "To insist upon the preservation of the highest standards of medical practice.
- To protect the public and the medical profession from State Monopoly in Medicine.
- To preserve the ethical and professional freedom of the individual doctor in the service of his patients and to maintain the status of the general practitioner, including his financial security.
- To oppose all encroachments by the State on the independence of medical educational institutions and to maintain the academic freedom of all teachers of Medicine.
- To define the limits of State Medicine so as to protect the rights of the public and of the medical profession in relation to all types of independent practice.
- To support and protect the character, status and interests of the medical profession generally."

The F.F.M. outline of future work includes the following aims:

- "We must not relax our efforts against absolute State control.
- We must press further to reinstate the General Practitioner as the keystone of the Service, the Ministry having placed excessive emphasis on the Hospital and the Consultant.
- We must continue to urge a drastic

re-organization of the N.H.S. which will give both patients and doctors full freedom.

● We must bring about the eventual removal of Medicine from politics."

We are headed for the same problems and stultifying rules and regulations in the practice of medicine in this country unless we all strive our utmost to fight against it, and *now* is the time to fight the strongest, before the battle is *over*, not *after*.

The Fellowship for Freedom in Medicine publishes a quarterly bulletin and at frequent intervals issues leaflets and pamphlets of vital interest to us in our fight. Subscription price for one year to this organization is two Guineas [$6.00] and checks may be sent direct to The Hon. Treasurer, *The Fellowship for Freedom in Medicine*, 50 Hallam Street, London W.1., England. Further details and pamphlets are available from *The Journal* office at the ISMA Headquarters.

Guest Editorial

The Power of Your Check

IN THESE DAYS of uncertainty, when it is often difficult to make plans far into the future, AMA-Education and Research Foundation is moving ahead with a Student Loan program that has its target set squarely in the long-term future—the future of American medicine. Its objective is to insure the quality of medical care for coming generations.

We know of few programs in which a comparatively small contribution can so dramatically promote the future welfare of so many Americans. A gift of $100 to the AMA-ERF Student Loan Fund will generate a bank loan of $1,250—enough to finance a medical student's training for half a year.

And the power of that $100 donation doesn't end there. When the medical student completes his training, he'll repay his debt and the $100 will return to the fund, where it can be available to help finance a medical education for another student.

Think of what a contribution of $1,000 could do if donated now—it could provide the financial aid to produce a new physician in 1970, another in 1977, in 1984, again in 1991, and in 1998. And the $1,000 would still be in the fund, ready to serve the cause of medicine again and again.

Physicians throughout the nation are being asked to contribute to this fund, which is now committed by loans made last year. Once again, Merck Sharp & Dohme has pledged $100,000 to be matched by individual physicians' donations. We urge you to do your share.

It is difficult to imagine a better way of putting dollars to work for the future of medicine.

F. J. L. Blasingame, M.D.
Executive Vice President,
American Medical Association

Editorial Notes . . .

Antivivisectionists, parading as "humane societies," are threatening the future of medical research as they prepare legislation for the present Congress. Last year they testified on legislation regarding humane slaughter, and have been encouraged by the passage of the bills. This year they hope to secure passage of laws which will restrict medical research. The National Society of Medical Research is sponsoring constructive legislation to counteract the anti-research drive.

Hand-made and home-made utility articles don't have much chance for survival anymore. The well known "doughnuts," which have been made by the thousands from cotton and roller bandage for the protection of heels and elbows, may not be with us long. A company in California now

manufactures a plastic heel protector with a washable cotton liner, and to make sure of a large market also makes an elbow protector of the same material. A great boon to the patient who must spend most of the time supine in bed.

A new integrated lighting and control console has been devised for installation in patient's rooms. In one compact unit are contained the general room lighting, the reading light, night light, physicians' examination light, as well as provisions for oxygen and vacuum system outlets, audio-visual nurses' call system, sockets for I. V. support arms, remote control radio and TV and built-in telephone plugs. The unit is called the Consolight and is available to engineers, architects and hospital planners.

Despite all the furor concerning the rapid increase in the cost of medical care, the fact remains that medical care has increased in cost 2.25 times since 1935, while the consumer price index has increased by 2.17 times. Considering the fact that medical care is considerably more efficacious now than it was in 1935, and that part of the improvement has been due to relatively expensive medications, the slight difference in the inflation of medical care cost and the cost of living really doesn't amount to much. You can still say that medical care is the biggest bargain there is on the market today.

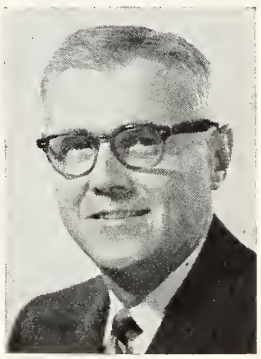
A "Letter to the Editor" of the *New England Journal of Medicine* in the December 13, 1962 issue is written by a hospital pharmacist to suggest that the new regulations in regard to the elaboration of drug information such as structural formula, therapeutic classification, side effects and toxic manifestations should apply to the detailing of drugs as well as to the package inserts. The general tone of the letter is one of haughty disdain for new drugs. The writer points out that prescription drugs will not be successful unless prescribed by physicians. He adds the hope that most of the new drugs will not be prescribed and will therefore sink into oblivion. He is apparently unaware of the fact that physicians are especially sensitive to any method of treatment that does not produce results, and that if the market is flooded with new preparations only the meritorious examples will survive.

Overinsurance in the health field has resulted in patients actually making a profit out of an illness and has caused administrative problems for the insuring companies. The Health Insurance Institute reports that a special study has been made and all health insurance companies have been advised to consider clauses in their policies to enable overinsurance in one category of medical or hospital bills to be applied toward correcting underinsurance in another category which is partially insured. Overinsurance occurs naturally in the group coverage plans when a man and wife work at separate establishments. Under the proposed plan, if each policy covers two-thirds of the room rent, the two policies together could pay the entire room rent and allow the excess coverage to be applied to some other item which was not fully covered by either policy. ◄

President's Page

HEALTH CARE FOR THE AGED

It is unfortunate that the political leaders of all persuasions and leaders of pressure groups have been able to convey to the public that the major item of concern in the health care of the aged lies in the realm of economics and methods of financing. Perhaps this is as typically American as the idea that large amounts of money spent in foreign aid will win the friendship of all, and that large amounts of money alone spent in crash programs will insure victory in the space race or in conquering such diseases as cancer or arteriosclerosis.



It is up to us as practitioners of medicine to reaffirm to the public the necessity of the homely virtues of affection, love, and respect for our elders within the family and community. They must be held within the framework of an active, alert, and vigorous society to the greatest degree possible. Personal responsibility must be stressed in planning for later years. There should be widespread community planning and programs for the care of the aged.

We are pleased with the activities of our Commission on Aging. They have stressed the importance of independent living, in which an individual through his own initiative and effort maintains as complete a state of independence as possible throughout his lifetime. A person's independency may be more nearly assured when only services which are necessary to restore him to self-sufficiency are made available. To this end the commission has been making a study of home care programs with homemaker and other ancillary services designed to keep people out of institutions, and to forestall dependency. They urge extension of rehabilitation services at a local level and stress the importance of having adequate rehabilitation services in nursing homes, county homes, and other facilities where the elderly are cared for on a long term basis. Extension of such services should be made possible to the homes of individuals through community services. They have requested each county society to establish liaison committees to guide and advise nursing homes and county homes in raising standards of care and improving services. They have recommended support for a bill currently before the Legislature which calls for a study of causes leading to institutionalization, the kind of services needed to forestall institutionalization, and the availability and quality of such services now existent in Indiana.

A bill has been introduced in the present Legislature to implement national legislation on Medical Assistance to the Aged (Kerr-Mills) to provide a wider latitude of financial assistance to those in need. This bill has been prepared with guidance and support from the Indiana State Medical Association and every effort will be made by our Commission on Legislation to secure its passage.

It is the privilege and duty of the health professions to isolate and examine the special factors bearing on the health of the aged, to render expert opinions as to how the challenges they pose be met, and to implement the necessary action. It is clearly in the interest of every American that the experts in health care be the ones to set the pace and direction of this progress, and not let it go by default to the social planners.

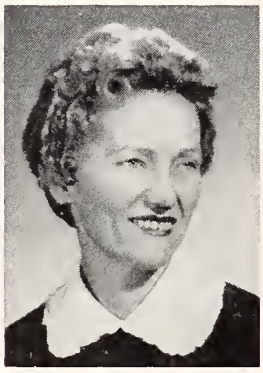
Maurice E. Slocke

The Woman's Auxiliary

REPORTS TO ISMA

"Do you want to be an American, or do you just want to live like one? Do we really know what it means to be an American, or do we just know what it's like to live in America?" This question was headlined in the *National Legion Auxiliary News.*

It is true that we become so concerned about our rights and privileges, that we forget there are duties and responsibilities. We let selfishness, ignorance, and complacency keep us from doing those things we should do to preserve our American way of life. We are proud of our great country, we are proud of our representative government, we are proud of the men and women who sacrificed to help shape the destiny of this land so that their children and their children's children might live in freedom. Can we sit back and see our freedoms snatched from us? We will unless we wake up to our duties and responsibilities.

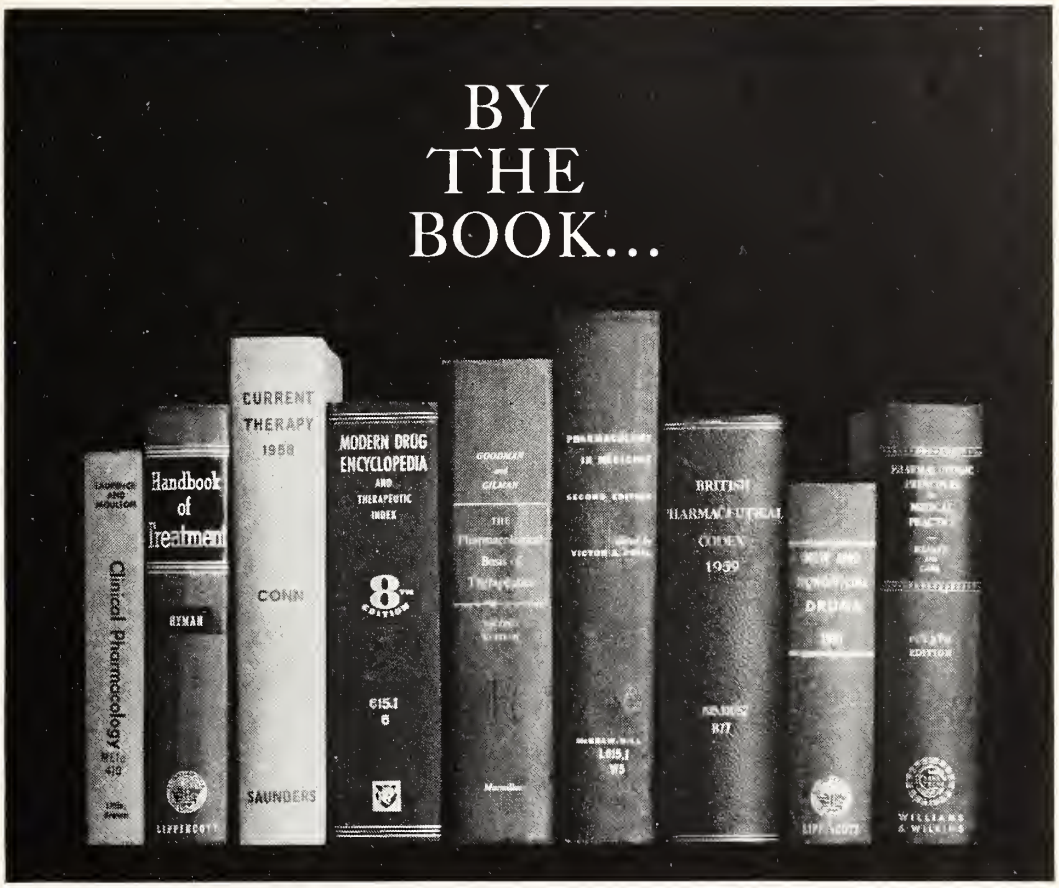


We must speak out for what we believe is right. We must exert our energies in community service, or someone else will step in and see that those things needing to be done are done, at a much higher cost, and no doubt with less efficiency, because we sat complacently and let it happen. Our own community is the logical and most important place to strengthen our ideals. Let us not think because our own town is small, that it will not be effective. This country is made up of thousands of small towns as compared to hundreds of big cities, and all are populated by people; people whom we can serve, people whom we can inform, people in whom we can have faith.

Community service embraces all activities for improving living conditions whether it be actually caring for the physical needs of people, or teaching them to improve their own lot in life. And just as certainly, we need to impress people with what it means to walk with honor and integrity in a free country.

As I write this article, our State Legislature and our National Congress are in session. As citizens, we need to be vitally interested in proposed legislation and voice our convictions to our elected representatives. Auxiliary members are urged to do so, and I know many of them do. As individuals we are urged to participate in all facets of community service. Certainly showing an interest in one's government and being willing to help see that we have the fairest and best possible laws to live by, is an obligation to one's community just as surely as being a Cub Scout den mother is a service to one's community.

Mary Johnson



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Report of the Topical Meeting on the Aged Of the First National Congress on Mental Illness and Health*

BYRON KILGORE, M.D.
Fort Wayne

IN VIEW OF THE current great interest in medical care of the aged, it is surprising that this section of the Congress of Mental Health was not attended by an overflow crowd. As a matter of fact, only about 20 persons made up the entire group, and only two participants were from Indiana. Over half of the group members were, in some capacity, attached to state hospitals.

Even more surprising, the group leader was not a physician, but an anthropologist, Leo W. Simmons. This is not as inconsistent as it might first appear since this was a multi-disciplinary meeting including psychologists, social workers, nurses, lawyers, legislators, etc. Dr. Simmons has been active in the health field for the past 25 years and has been interested in all aspects of aging among the peoples of the world since 1927. He plans to retire soon and devote his time to research in this important aspect of health. He is currently executive officer of the Institute of Research and Service in Nursing Education, Teachers College, Columbia University, New York City.

The recorder and co-leader was Dr. Wilma Donahue, an educator from the University of Michigan. An unofficial co-leader, whom Dr. Simmons had apparently chosen on his own, was a Dr. Alvin Goldfarb, also from New York. Most of the discussion ultimately was directed by Dr. Simmons to Dr. Goldfarb. There were two other physicians placed strategically up front near the speaker's table, whose names I did not get. Although many of the questions originated in the body of the group, by far the greatest amount of the discussion was carried on by these five people, Dr. Simmons, Dr. Goldfarb, Dr. Donahue and the other two doctors.

Dr. Simmons made an opening statement in which he pointed out that this was a work group whose specific job was to draw up recommendations for action in this field. He pointed out that the work from this group would go into two papers. One report would go to the state regional meeting to be held the following day, and then results and recommendations of the regional meetings were to be consolidated in the final report for action. (The report from the section on the aged never arrived at the regional meetings, and Dr. Nathan Salon reported for the Indiana group. We had been promised a report before the regional meeting.)

Wide Gap of Unmet Needs

Dr. Simmons emphasized that the AMA meant business, really meant to take action. He said that he had never before been so impressed by the charge given him by the chairman of the Congress Planning Committee, M. Ralph Kaufman, M.D., also of New York City. He stated that there was a sense of urgency about the congress. When asked by one of the participants if the urgency was in any way connected with the Medicare program and the impending

* Sponsored by the American Medical Association with the cooperation of the American Psychiatric Association and the support of the National Association for Mental Health, Chicago, Illinois, October 4-6.

elections, both he and Dr. Kaufman, who happened to be visiting the room at the time, emphatically denied this. Dr. Kaufman explained that the urgency was part of his personality and had nothing to do with the possible legislation concerning medical care for the aged.

Dr. Simmons explained to the group that central to the report is the wide gap of unmet needs between private and state care for the aged. It is this area into which the AMA wishes to move. He asserted that the AMA recognizes that the job is too big to be done by physicians, either individually or in groups. Because of the complexity and formidable nature of the problem, the assistance of non-medical persons is also required, and this accounted for their being at this meeting.

Further instructions to the group by Dr. Simmons implied that we, the group, were to make general and specific recommendations after spotting and talking about problems concerning the aged. He drew the following chart which was intended to suggest points for consideration:

Who	What	Levels
Physician	Clinical Service Social Service	Local
Medical Organizations	Education Legislation Financing	State
Para-medical Professions	Research	Federal

Dr. Simmons was careful to point out that we should consider a wide spectrum of charges first, and then come up with as many specific recommendations as we could. Perhaps 15 or 16 recommendations would be as many as we could be expected to produce in the allotted time. It was his opinion that we should therefore stick to the who and what columns and not concern ourselves with the levels. He added that we should also keep in mind the sense of priority for the various levels.

Since many references were made during the session to the "Action for Mental Health" report,* the following paragraphs pertaining to the aged are given in full.†

"The Aged—Our rapidly increasing aged population has special mental health problems involving, among other factors, improved care facilities and greater integration into community life. The AMA discourages the use of public mental hospitals as custodial facilities for the non-psychiatric aged and supports the development of new and adequate community facilities staffed by well-trained personnel.

"On the community level, available psychiatric facilities should be assessed and steps taken to correct existing shortages. Special housing facilities for the non-senile aged should be encouraged as well as an expansion of units available for psychiatric care of the aged in general hospitals. State and local medical societies are urged to provide community leadership in establishing facilities to meet medical and social needs of the aged."

The "Stigma" of Advanced Age

Group discussion began around the questions of "What do we mean by the term aged?" "When does it begin?" "What type aged persons are we concerned with?" It was felt that the term aged should not be used since aging is such a relative state, some persons "aging" prematurely and others remaining "young" with advancing years. A semantic dilemma developed. It was finally decided that age per se is not a good criteria to use in attempting to set up a special group. By no means should an arbitrary age limit be set, such as age 65, since this tends to stigmatize people and suggest that they have reached the end of productivity and are now placed on the shelf.

Suddenly the group realized that they were talking about a very heterogenous

* This is the title of the Joint Commission Report of the American Medical Association and the American Psychiatric Association. The study was started in 1955 and lasted five years. Some 36 national organizations participated in the study. The AMA Board of Trustees decided that the joint report was to be the basis for the program of this conference.

† AMA pamphlet—*Program of the Council on Mental Health*, page 8.

Continued on page 336



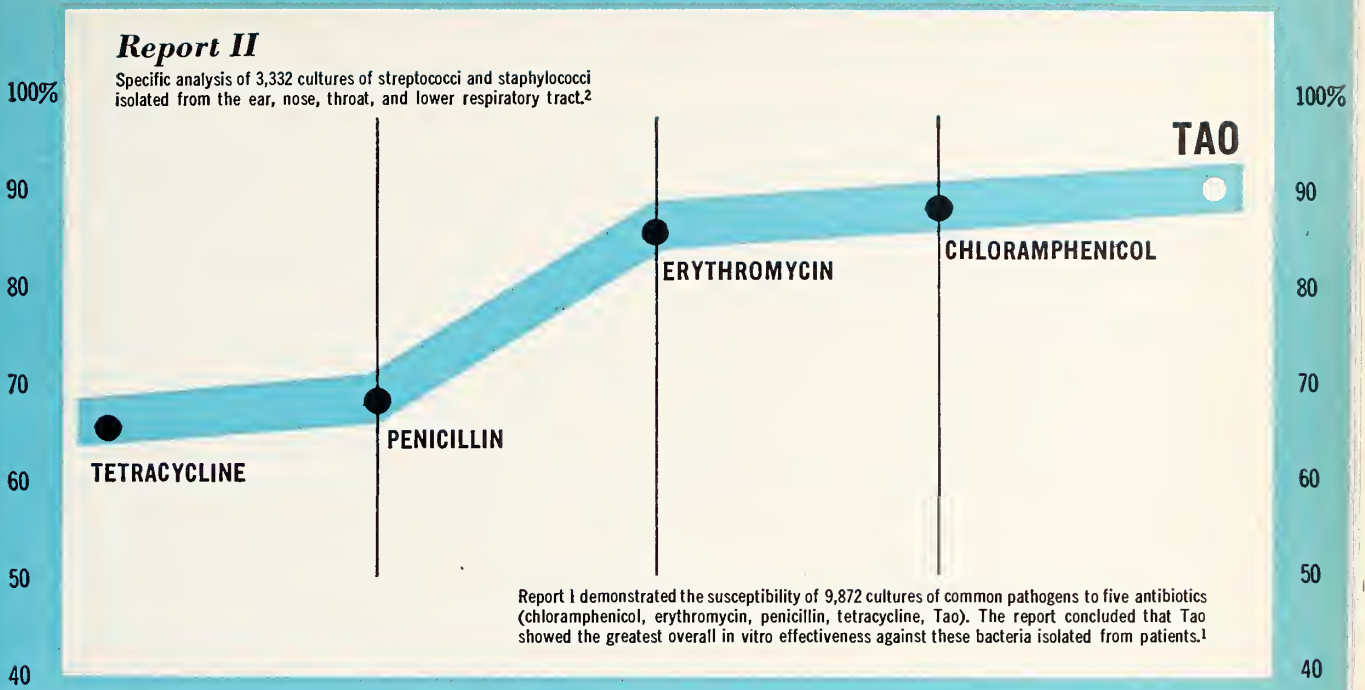
FROM A NATIONWIDE SURVEY OF 9,872 CULTURES OF COMMON PATHOGENS[1]

Conclusions of Nationwide Survey: *Report I*

1. **Even after five years of general use,** Tao, of the antibiotics tested, demonstrated greatest activity against respiratory streptococci and staphylococci (3,332 cultures).

2. **Overall results showed a higher percentage of susceptibility** among these common pathogens to Tao than to the other antibiotics. Susceptibility to Tao was greatest, not only in respiratory streptococci and staphylococci, but also in these organisms isolated from skin and soft tissue (3,423 cultures), genitourinary and gastrointestinal tracts and other sources (2,458 cultures). Susceptibility was equal to all antibiotics tested in pneumococci from unspecified sources (463 cultures), and less to Tao in H. influenzae from unspecified sources (196 cultures).

3. **Tao has been used for five years without development of predictable cross resistance.** In 1958 and 1961, approximately 73% and 70%, respectively, of erythromycin-resistant problem staphylococci showed susceptibility to Tao.[3,4] The present study confirms the continuing high degree of Tao activity even against these pathogens. Of 1,592 cultures of erythromycin-resistant staphylococci, 68% were susceptible to Tao, while in the reverse situation, only 33% of 768 Tao-resistant staphylococci were susceptible to erythromycin.



Report II

Results of Bacterial Susceptibility in 3,332 Respiratory Pathogens

References

1. "Bacterial Susceptibility Patterns: A Geographic Survey." Fowler, J. Ralph, M.D., and Watters, John L., M.D. Scientific Exhibit presented at the Annual Meeting of the American Society of Clinical Pathologists, Chicago, Ill., August 31 to September 9, 1962. 2. Fowler, J. Ralph, Watters, John L. and Levy, Arthur M.: Bacterial Susceptibility Patterns as Related to Geographic Variation and Anatomical Source. In press. 3. English, A. R., and Fink, F. C.: Antibiot. & Chemother. 3:420 (Aug.) 1958. 4. English, A. R., and Fink, F. C.: Antibiot. and Chemother. 11:648 (Oct.) 1961.

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group of mentally ill who only incidentally were no longer young. Some had in mind the organically damaged, others the emotionally disturbed older persons and still others the socially incompetent and "unwanted" older citizens. Finally a definition was reached, which would answer the question, "What type of persons were we talking about?" We found that we were referring to "older persons with mental problems, be they organic, psychological, psycho-biological, or a reaction to a social situation."

Ideas and questions then began to come in profusion. The group of five somehow always seemed to have the last word in phrasing the recommendations.

An elderly psychiatrist suggested that a research project be set up to explore the general physicians' attitude toward the older patient. In his experience he had gotten the strong impression that the physician's attitude is either consciously or unconsciously one of assuming that the older patient "has had it" and cannot be helped too much—so why make a big effort? This in part was thought to account for the "dumping syndrome," that is, dumping the older patients in nursing homes or state hospitals. A recommendation was then approved to initiate research in this area.

Although such a research recommendation was made, it seemed to be a fully accepted concept that many physicians do have such an attitude of resignation in approaching the care of their older patients with mental problems. It was therefore recommended that there must be a change away from the static thinking that an older person with a mental or emotional problem cannot be helped. Knowledge must be imparted to the physician and public that a large number of acute problems are reversible or can be greatly improved, and that regardless of the degree of the problem, much can be offered to persons whose ultimate deterioration is inevitable.

Education for Retirement

Closely tied in with this idea of changing current public and physician attitudes toward the older person, was a suggestion that a general long-range educational program should be set up. It was recommended that, beginning in early childhood, and carrying right on into adulthood, education should be directed toward accepting the concept of growing old with ultimate death. It was also felt that preparation for retirement should be an integral part of our educational system.

It was strongly recommended that diagnostic screening centers, using the team approach, either in general hospitals or as individual clinics, should be established to help the general practitioner in evaluating problems of the older mentally ill patients. Closely tied in with this recommendation was the suggestion that there has been a considerable body of knowledge accumulated in the last decade, pertaining to the care and treatment of the older patients, and that this knowledge should be actively disseminated to physicians. Active participation of community physicians in such screening centers is one of the best ways for them to acquire such knowledge, by the so-called "drip method." The average physician was thought to be a good student and eager to learn.

There was open disagreement with the statement made by the joint commission's report discouraging the use of public mental hospitals as custodial facilities for the "non-psychiatric" patients. The thinking was that these persons placed in such institutions must have at least a psycho-social problem or they would not be "dumped." Although care in such institutions is in general substandard, it is the best that society has to offer at this time.

The group also took exception with the joint committee's report that segregation of the aged in special housing was a desirable goal. The recommendation was that the older person should, whenever possible, remain as a respected integral part of his community. Full cooperation of paramedical professionals will be needed but with medical leadership.

It was recommended that more interest and action on the county medical society level should be generated, so that the individual physician becomes motivated to the point of participating in the study and care of older persons in nearby state hospitals. This will result in the discharge of many patients back to their communities and families. County medical societies could set up a roster type liaison committee for this purpose. The educational advantage to the physician, by the "drip method" of learning about the care of the older patient by participating, would be considerable.

It was recommended that some closer inspection or counseling of state mental hospitals by representatives of AMA and APA, in regard to more definitive care of the older patients, be initiated.

A recommendation also was made that health insurance programs be altered to allow long-term psychiatric care of older persons.

It was recognized that medical care for the older patients is just as expensive as at any other age, and just as necessary. They recommended that although financing is least expensive at the grass roots level, it is often necessary to resort to state help, therefore the entire system of giving and financing necessary and humane aid to older persons with mental problems, should be re-examined. Para-medical professionals will have to be used in this area, but again with medical leadership. ◄

227 East Washington Blvd.
Fort Wayne, Indiana

About Our Cover



No! *The Journal* is not mad as a March hare! Our cover only goes to show that one never knows what to expect just around the corner of a country road. Obviously, though, the photograph was taken in the middle of March for, as the old adage tells us, "March comes in like a lion and goes out like a lamb." I think this photograph shows the lion somewhat angered by the presence of the newly arrived lambs!

My personal hope is that this adage proves to be true. Though the poet Shelley assures us that "If Winter comes can Spring be far behind?" I had a hard time in placing any credence in this immortal line of verse during the winter now ending —we all hope.

During January in fact, I had a strong suspicion that Spring had conceded the victory to Winter and that the second ice age had undoubtedly gripped our hemisphere . . . but maybe that glacier I saw was only a figment of a frozen imagination or a mirage brought about by incipient snow blindness!—M.E.R.

Photograph by H. Armstrong Roberts, Philadelphia.

Doctor Diplomats

More News from the Congo

The missionary thrust of the Christian churches in the fields of medicine, education and agriculture are tremendous sagas of persistence and true brotherhood but would not interest more than a small group. The purely medical aspect of the visit, as we compete with the local witch doctors for our share of the medical franc, is a fascinating mixture of voodoo and science as one doctor several hundred miles from any other medical help tries to run a 250-bed hospital (built for 50 patients in 1952) with a group of native Infirmiers or nurses who have had a sixth grade education.

Exotic diseases like loa-loa, cerebral malaria, leprosy, sleeping sickness, and smallpox may stir some distant cerebral corner but have to be experienced personally before they become alive and real. The real urge, of course, is to pontificate on the political situation and I have distinct ideas that Katanga is going to end up a country in Africa where black and white will work together in mutual brotherhood. Moise Tshombe is a brilliant and good Christian man but I must not forget that I am a "ninety-day wonder" without the true gift of prophecy.

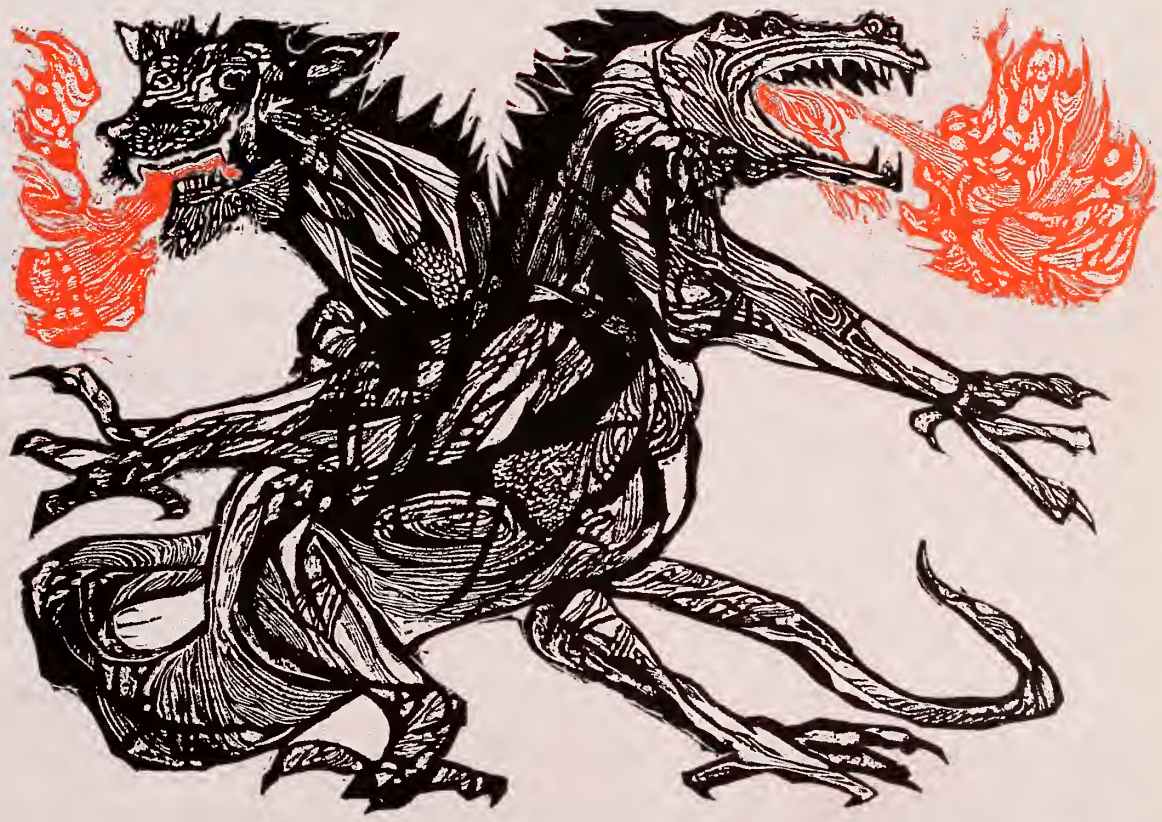
The only really safe thing left then is to talk about the weather but I'll go a bit further than that. In last summers' issue of the American Medical Association newspaper there was a clipping that caught my eye. In it Theodore R. Van Dellen, M.D., medical editor of the *Chicago Tribune,* was quoted as saying before a group of physicians' wives in a program sponsored by the Auxiliary of the AMA, there were ten ways to keep the doctor in the house in good health. He mentioned the usual things —yearly physical exam, low cholesterol reduction diet, moderation in all things, regular exercise and a relaxed home atmosphere—but one point was given more space than any of the others.

It was the suggestion that wives try to slow the old man down and he made the very cogent suggestion that it might be good for a physician to take six months off and go to the Congo as a medical missionary. After a stint of three months I can verify that this is an excellent suggestion. One of my associates, who comes from a part of Indiana where homely similes are a part of everyday living, likens the practice of medicine to eating a straw mattress every day. He says it isn't so bad if you start off the first day eating one straw and every day add one more straw until each day a full mattress is consumed and you don't even realize it.

This is a complete change of pace and it allows one to get out of his rut and reevaluate himself and the windmills that he does battle with each day. There are no schedules and no telephones and social obligations are a minimal problem. The physician is fortunate that he can go into a structured situation of a hospital and, even with great language barriers, make a very positive contribution even during a short span of several months. If six orthopedists, neurosurgeons or other physicians would get together and pay their own traveling expenses, cover for each other, and stay for two months each, a year of witness and concern could be arranged by most any local church group somewhere in the world and it would be better than a lot of griping at the way the government is handling foreign relations. The greatest good would be to the physicians involved, however, who would find at the least a new and fresh outlook on life and at the most an entirely new way to follow. ◄

Sincerely yours,
Hunter A. Soper, M.D.

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The last of three papers to be published on voluntary health insurance. They were presented at the Indiana Academy of General Practice "Insurance Day," Sept. 9, 1962.

The Present and Future of Blue Shield In Indiana

*W. L. PORTTEUS, M.D.**
Franklin

MOST OF MY REMARKS this morning will be concerned with the state of Blue Shield today, with some comments as to what the future holds for us here in Indiana.

Since our first contract was written in 1946, we have grown until now almost one-third of the population of the state is included in our membership.

Blue Shield today is a successful prepayment organization—ready and equipped to help all the people in Indiana. Last year we paid out more than $18 million for members' doctor bills out of an income of $19 million. We devoted a little more than eight percent of our income for the year to the cost of operating our business—a noteworthy example of continuing economy of operation.

During the year we continued to make changes in benefit patterns available to make them consistent with changes in medical practices, and to meet the needs and demands of the public. We also made every effort to sell new accounts and to convert old accounts to broader benefits, and continued to offer preferred surgical and in-hospital medical protection to our direct pay members who originally obtained their protection through a group.

The protection we offer today is a far cry from the benefits available when Blue Shield was organized. Our first program covered only surgical and obstetrical care. Our benefit patterns today include coverage for anesthesia, in-hospital medical care, and diagnostic x-ray and pathology. There are now two basic surgical schedules: the standard and the preferred. In addition contracts in some areas provide a special county schedule and a special schedule for the steel industry.

Expanded Coverage

At the end of 1961 we were furnishing in-hospital medical protection to more than 90% of our membership. This protection is now being sold in the form of 30, 70, 120 and 365-day programs, with additional flexibility made possible by endorsements that increase the amount allowed per day.

Blue Shield also now has a pilot study home and office call program, a health security program which corresponds with major medical, and other special programs developed for specific areas within the state. We are continuing to experiment with other types of coverage, and will play an aggressive role in expanding coverage into areas never before deemed possible.

The general policy of both Blue Shield and Blue Cross is to make available any type of program that is needed, that is actuarially sound, and that is in demand.

From the beginning Blue Shield has recognized the needs of the 65 and over and has always emphasized programs for the aged. A special study made this year shows that more than one-third of the 65 and over Hoosiers are now protected by Blue Shield.

This year's open enrollment campaign will run from October 1 through October 8, 1962. During this period everyone is eligible to join, regardless of their age or physical condition. New benefits have been developed for this campaign. All persons will be offered a choice of a high option or a low option, so they can choose the benefits

* President, Mutual Medical Insurance, Inc.

that best fit their needs and economic status. This is the sixth such campaign during the past nine years.

Blue Shield has never cancelled a membership or reduced benefits because of age or use of benefits, and our efforts to enroll more and more of the total population will continue.

Blue Shield was established not as a business enterprise, but as a mechanism to help us deliver our services to our patients through prepayment. Blue Shield furnishes the type of protection to members that doctors feel they need, and devotes every possible penny of each membership fee dollar to the payment for medical care services.

Successful Pioneering

Why are doctors in the "insurance" business? The answer is simple. Back in the years when we were considering Blue Shield for Indiana, we approached more than 40 insurance companies operating in Indiana and because of limited experience they refused to help us solve the problem. Since then, chiefly because of the successful pioneering of Blue Shield and Blue Cross, hundreds of companies have gone into the business and are giving us plenty of competition.

But none of them are doing the job for our patients that Blue Shield is doing. One of the most important tests of performance for any organization in the health insurance or prepayment field is the percentage of membership fees returned to members in benefits. In 1961 Blue Shield paid out to members for doctor's services 93 cents of every dollar received in membership fees.

We've checked the reports of 57 of the largest insurance companies in the field and not one of them matched our record. In fact, 36 of these 57 companies returned to their policy holders less than 75 cents of each dollar paid in, and three companies with the poorest performance paid out only 35, 37 and 39 cents of each dollar. Many make 50% reduction in benefits after age 60.

A few companies in the group field are forced by competition to do almost as good a job as we are doing, but all are way below us in performance in the direct pay area. Commercial insurance companies operating in Indiana and selling individual or direct-paying protection reported approximately 60 cents paid out for each dollar received in premiums. The people who buy this type of insurance are mostly the people who are retired, over 65, and of low income—the very people who have the greatest need for sound protection.

Broader Forms of Coverage

The doctors of Indiana got into this business because nobody else wanted it, and we should stay in it because our patients can't get the prepayment service we offer anywhere else.

Today, I believe Blue Shield faces challenges and problems that may determine its very survival. In brief, I believe these include:

1. We need to extend further voluntary coverage among those not eligible for group enrollment, including the 65 and over, self employed, and others of low income. In my opinion governmental units will need to continue to be responsible for the health care of the indigent.

2. We need to develop additional coverage suitable to the needs and economic status of our senior citizens. This is a difficult underwriting problem, because it involves a need for broad programs and reduced cost.

3. We need to develop and refine broader forms of coverage and benefit patterns to match our patients' needs and desires.

4. We need to develop comprehensive programs of public education and doctor orientation—to help the public and doctor assess realistically the limits within which voluntary health insurance must function to assure an equitable distribution of services to all members according to need rather than desire.

The last item probably is one of our most pressing problems. When Blue Shield was first organized the idea was to have a plan that everyone could join. Members would pay in a set amount each month and anyone who was sick or hurt could get needed medical care and help towards paying this bill. Blue Shield is merely a way of pooling

money to protect members against part of the economic consequences of sickness or injury. It is important at this time that we educate our members and the medical profession in the proper use of Blue Shield coverage. There is much that the doctors and Blue Shield can do in helping solve this problem. There must be a real basis of co-operation between the doctors, Blue Shield, and the members themselves.

Other problems that Blue Shield will probably need to solve in the future include:

1. The development of methods to meet continuing political pressure in favor of Social Security medicine. This pressure will be stronger in the months ahead than any we have witnessed in the past.

2. Utilization committees will need to play a stronger role than they have in the past. They will need to be acutely aware of the effect of medical practice upon the cost of health care, and will need to determine whether admissions are justifiable, whether the length of stay is justifiable as well as the various services furnished. I'm sure it will be better to have active local committees of our own, rather than a committee under state control setting limits to hospital stay and services.

3. Today there are no laws to protect against abuse in the use of health insurance comparable to those that apply to fire insurance. Some people have double and triple coverage, and can make a profit from health insurance. Something needs to be done to make impossible this type of double coverage.

4. We need to develop a better approach in competing with commercial insurance companies who sell package life and health insurance as a "loss leader."

5. In the future we may need to reach an agreement with local governments so that we can administer on a cost basis health care protection for welfare and other indigents. Programs attempting to solve this problem have been developed in Texas and Colorado.

6. To better solve all of our problems, we will need to find better ways to foster two-way communication between Blue Shield and doctors.

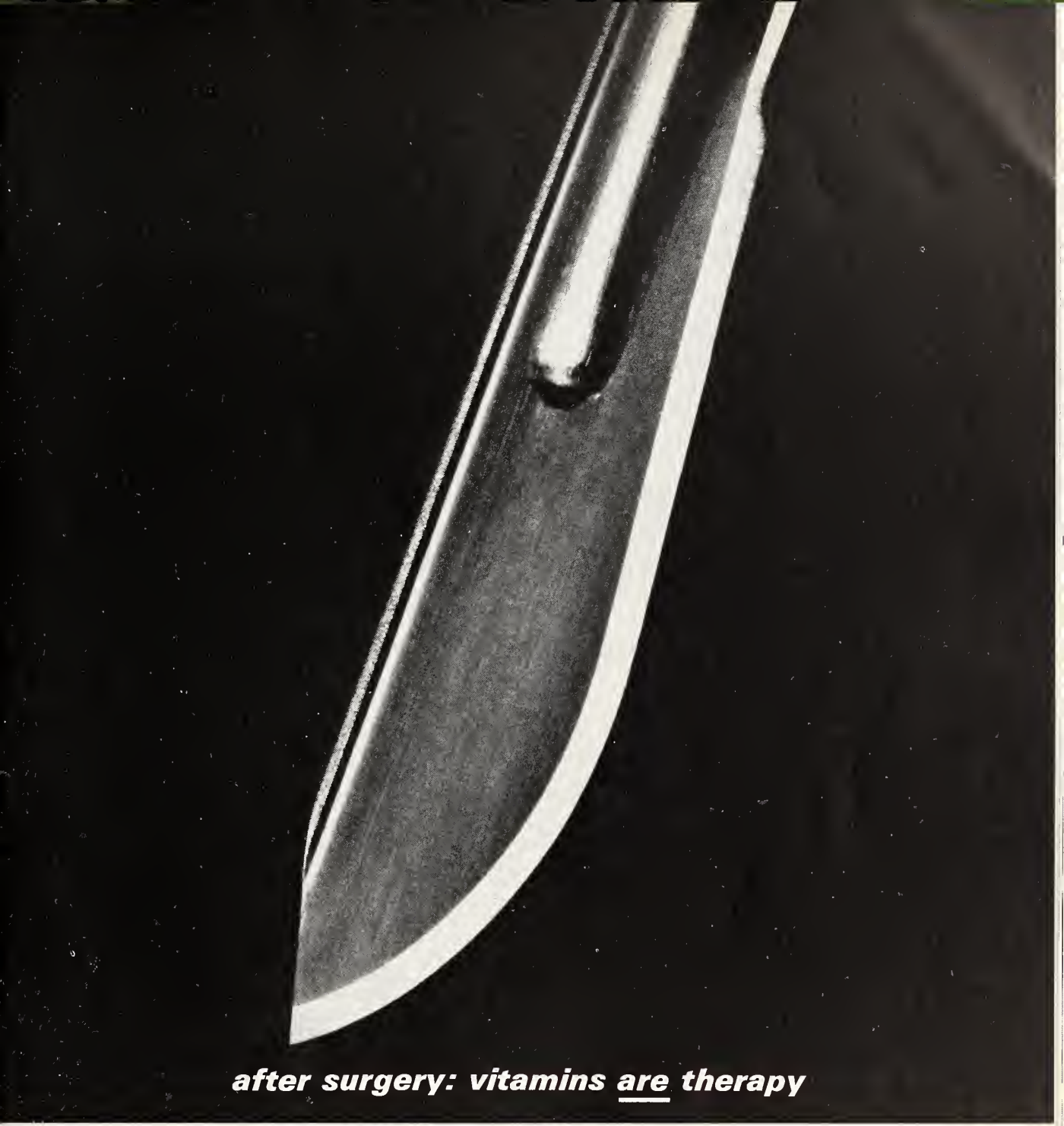
The medical profession was responsible for the organization of Blue Shield. The doctors of the state alone hold the key to Blue Shield's future, and their leadership will determine whether the plan and the doctors are ready to respond to the opportunities that lie ahead, or whether big business, big government or big unions take over the health care problems of the people.

Blue Shield will go as far as the doctors want it to go. It will be as important and as successful as doctors want it to be. It cannot proceed to a brighter tomorrow without the medical profession's guidance, control and leadership. The relationship between the individual doctor and his plan is of first importance.

The profession must make Blue Shield something which each doctor will want to support. This role requires the efforts of physicians, individually and collectively.

Lay employees can help do this job, but it will need the active support of all the profession if Blue Shield is to be understood by every doctor, and every doctor understands the current problems he must help solve through Blue Shield. We have come a long way since 1946 in Indiana and we have a long way to go.

To shape a better future for Blue Shield, it is imperative that we approach our problems of development not with passionate criticism drawn from pure emotion, but rather through a rational assessment of facts as they relate to reasonable and attainable goals. ◄



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Vitamin B_6 (Pyridoxine HCl)	2 mg.
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Report of the Perinatal Division of the Maternal and Perinatal Mortality And Morbidity Committee

Indiana Section
1961-62

EARLY IN 1962, a postcard questionnaire was mailed to all of the obstetrical departments of hospitals in Indiana along with a short letter of explanation as to the purpose of the survey. This was the second such survey conducted in Indiana, the first having been done under the auspices of this committee in 1960. A total of 106 hospitals were contacted and 47 cards were returned plus two letters of inquiry or explanation, accounting for a 46% response.

The questionnaire was as follows:

The _____ Hospital

1. (Has ____, has not ____) now functioning a Perinatal Mortality Conference.
2. Has ____ established a study committee since the 1960 survey.
3. (Plans ____, does not plan ____) to establish a Perinatal Mortality Conference.
4. (Would ____, would not ____) like assistance in establishing a Perinatal Mortality Conference.
5. (Is ____, is not ____) participating in the AMA Perinatal Study.

Obviously questions two and five were new to the questionnaire.

The hospitals replying were classified according to the number of their obstetrical beds. There were 10 having 10 or fewer beds, 17 having 11-20 beds, five having 21-30 beds, five having 31-40 beds, five having 41-50 beds, and five hospitals having over 50 beds each. These represented a total of 1,190 obstetrical beds. Total number of beds not reported represented by unreturned cards were 995, or 45.5%.

Fourteen (28%) hospitals indicated they had an existing study committee, seven of which had been established since the last survey. Fourteen (28%) hospitals requested help or information for establishing study committees and seven indicated definite plans for establishing committees, while 14 (28%) rejected any offer of assistance. Five hospitals were participating in the AMA Perinatal Study, while one

	Hospital Beds	Replies	1A	1B	2	3A	3B	4A	4B	5A	5B
	0-10	10	1	9	0	1	7	3	5		8
	11-20	17	2	14	1	2	9	5	5		13
	21-30	5	2	3	2	1	2	1	2	2	3
	31-40	5	1	3	1	1	2	3	1		4
	41-50	5	3	2	2	2		2		1	3
	51 or more	5	5		1				1	2	3
Total	1,190	47	14	31	7	7	20	14	14	5	34

FIGURE 1

hospital indicated it was participating in a "Professional Activity Study" at Ann Arbor, Michigan.

The hospitals which requested aid were sent copies of "A Guide for the Study of Perinatal Mortality and Morbidity" as published in 1959 by the American Medical Association. One of these hospitals made a re-order for six copies of the guide.

All five hospitals having over 50 obstetrical beds had study committees, while three of five hospitals with 41-50 beds had committees. One hospital having but four obstetrical beds reported having a committee. However, five hospitals having 0-10 beds requested aid in establishing committees as did also five hospitals in the 11-20 classification.

Hospitals who had established committees since 1960 were:

1. Dubois County Memorial Hospital, Jasper (18 beds).
2. Elkhart General Hospital, Elkhart (28 beds).
3. St. Mary's Hospital, Evansville (30 beds).
4. St. John's Hickey Memorial Hospital, Anderson (39 beds).
5. Ball Memorial Hospital, Muncie (42 beds).
6. Lutheran Hospital, Fort Wayne (50 beds).
7. St. Francis Hospital, Beech Grove (60 beds).

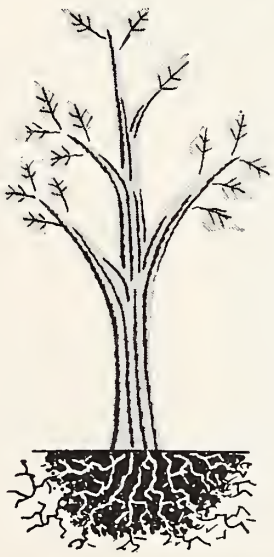
Hospitals participating in the AMA Perinatal Study were:

1. Memorial Hospital of South Bend.
2. St. Mary's Hospital of Evansville.
3. Elkhart General Hospital, Elkhart.
4. Marion County General Hospital, Indianapolis.
5. Indiana University Medical Center, Indianapolis.

A "thank you" letter was received from one hospital after a copy of the guide had been mailed to them. ◄

Charles F. Gillespie, M. D.
Committee of Perinatal and Maternal Health
District V, American College of Obstetricians and Gynecologists

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Tabardilho, a type of tick typhus, is probably an analog of Rocky Mountain spotted fever, and is caused by *Rickettsia rickettsii.* The tick vectors are any of several species of amblyomma.* The natural reservoirs are the opossum, dogs, the wild rabbit, and the agouti,* a rodent about the size of a rabbit. Mortality is reported to run as high as 80%.

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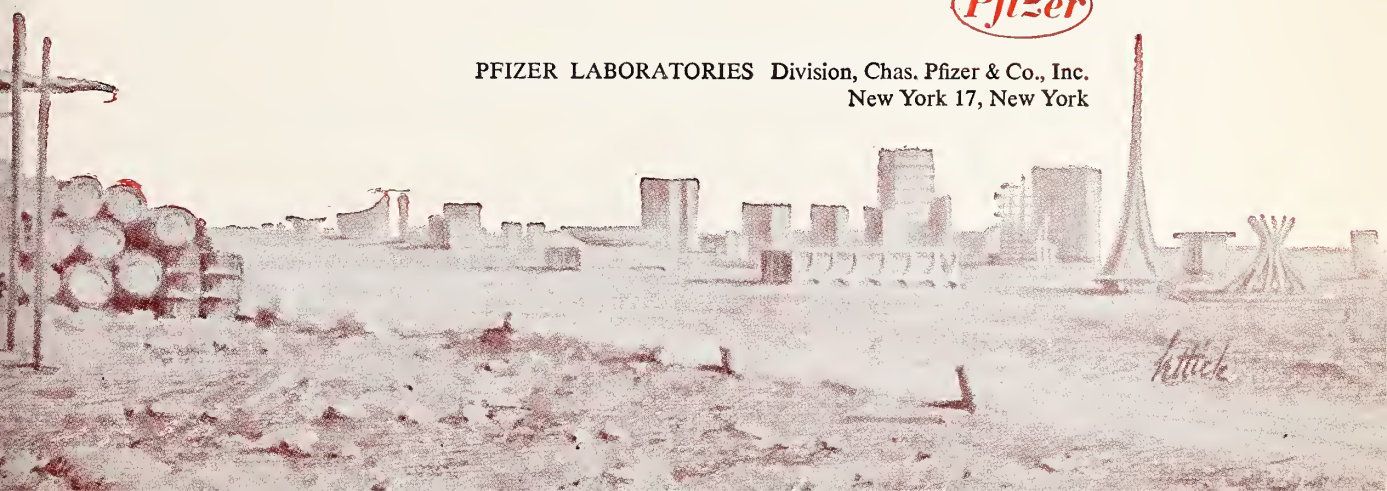


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TAPES OF THE MONTH

A recording service of scientific lectures by recognized medical authorities prepared by the Commission on Medical Education and Licensure.

CHEST AND RESPIRATORY

CR-12001 **UNUSUAL PATTERNS IN COMMON PULMONARY DISEASES** — Jerome F. Wiot, M.D., Cincinnati, Ohio. Recorded: Kentucky State Meeting. Date: Sept. 19, 1961. Time: 15 minutes.

CR-12002 **BASIC CHEST DIAGNOSIS FROM AN INTERNIST'S STANDPOINT**—Virgil A. Plessinger, M.D., Cincinnati, Ohio. Recorded: Kentucky State Meeting. Date: Sept. 19, 1961.

CR-12003 **MEDICAL ASPECTS OF CHEST TRAUMA** —Virgil A. Plessinger, M.D., Cincinnati, Ohio. Recorded: Kentucky State Meeting. Date: Sept. 20, 1961. Time: 25 minutes.

CARDIOVASCULAR

CV-548 **MANAGEMENT OF HEART DISEASE IN PREGNANCY**—Walter S. Coe, M.D., Louisville, Ky., moderator; "Medical Aspects," Samuel H. Sandifer, M.D., Ft. Knox, Ky.; "Obstetrical Aspects," Curtis L. Mendelson, M.D., Abaco, Bahamas; "Anesthesiological Aspects," Ray T. Parmley, M.D., Wichita, Kans. Recorded: Kentucky State Meeting. Date: Sept. 18, 1962. Time: 1 hour, 25 minutes.

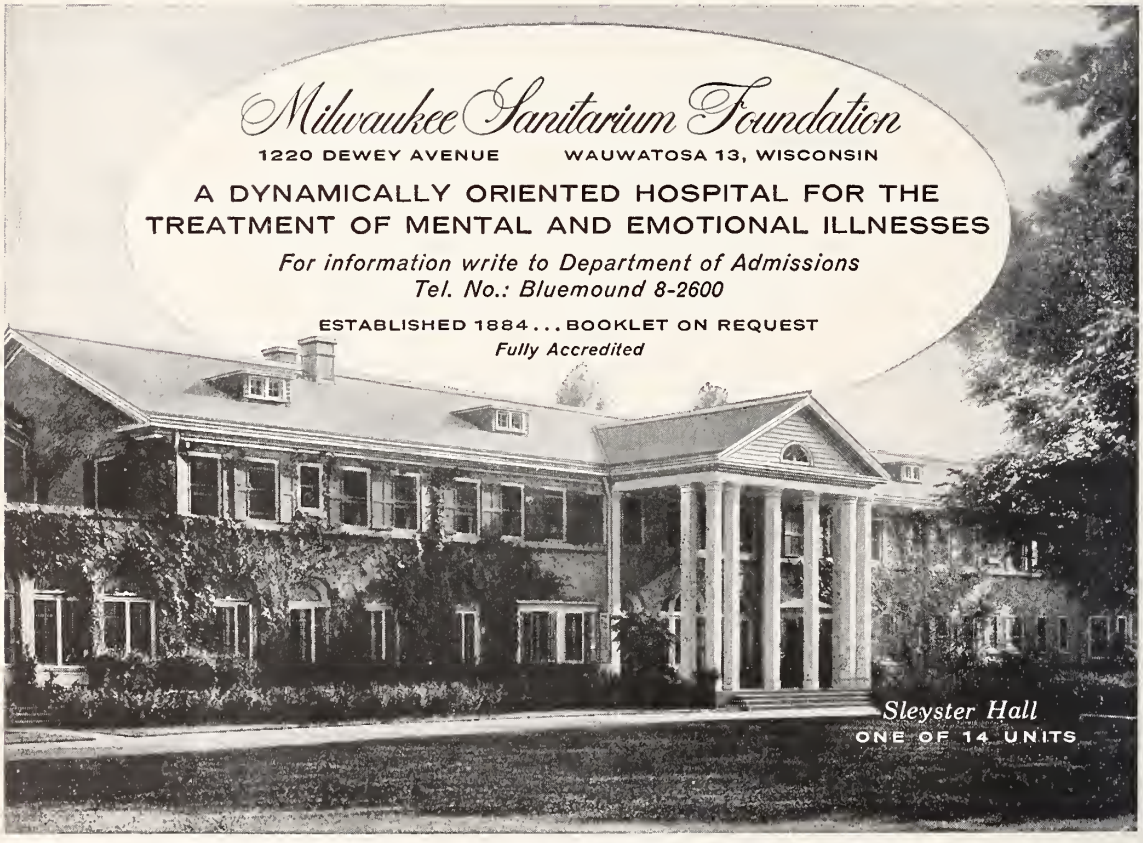
PUBLIC RELATIONS AND NON-SCIENTIFIC

NS-365 **SOME IMPORTANT HEALTH PROBLEMS IN UNDERDEVELOPED COUNTRIES** — James A. Halstead, M.D., Detroit, Mich. Recorded: Kentucky State Meeting. Date: Sept. 18, 1962. Time: 20 minutes.

SOCIAL

SI-802 **A PRESCRIPTION FOR THE ALLEVIATION OF WELFARE ABUSES AND ILLIGITIMACY**—H. Curtis Wood, Jr., M.D., Philadelphia, Penn. Recorded: Kentucky State Meeting. Date: Sept. 18, 1962. Time: 30 minutes.

SI-803 **JUVENILE DELINQUENCY**—Donal E. J. McNamara, New York Institute of Criminology, New York; Jackson A. Smith, Illinois State Psychiatric Institute, Chicago, Ill. Recorded: Indiana State Meeting. Date: Oct. 10, 1962. Time: 1 hour, 20 minutes. ◄





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CM-7972

Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Hospital Staff Membership not Protected by Staff Bylaws—Even though the Bylaws of a hospital medical staff provided for a hearing if a recommendation for reappointment is not given, this provision did not bar the Board of Governors of the hospital from denying reappointment without a hearing.

Because of a difference of professional opinion, the Chief of the Neurological Surgery Service of a hospital did not recommend reappointment of a doctor who had been on the staff for 12 years. The doctor was given a hearing at his request, but was not confronted by the witnesses against him nor allowed to cross-examine them. Renewal of his appointment was denied by the Board of Governors of the hospital.

A judgment dismissing the doctor's suit to compel his reinstatement was affirmed by an intermediate appellate court in Texas. The court found that the Board of Governors had an unrestricted right to grant or deny appointment or reappointment of doctors to the hospital staff, and that the staff organization and its committees had authority only to recommend that a doctor be reappointed or not. Therefore, it said that it did not have to decide whether the doctor had been given a proper hearing.

Weary v. Baylor University Hospital, 360 S.W. 2d 895 (Tex., Oct. 4, 1962, rehearing denied, Oct. 25, 1962).

Hospital not Liable for Fall on Waxed Floor—Dismissal of a suit by a hospital visitor for damages suffered in a fall in a hospital hallway was affirmed by an intermediate appellate court in Louisiana. It said that the preponderance of evidence did not show that the hospital failed to exercise reasonable care in providing a safe passageway.

The visitor, a 71-year-old widow, claimed that she slipped because of excessive wax on the floor. Although it was conceded that there was more wax than usual on the floor, the trial court ruled that the floor was not unreasonably slippery at the time of the fall.

Himel v. Ryder, 146 So. 2d 209 (La., Nov. 5, 1962).

Doctor's License Properly Suspended for Fraud—The suspension of a New York doctor's license for fraud was confirmed by an intermediate appellate court in that state. There was sufficient evidence to permit a finding that the doctor was guilty, the court said.

The doctor was charged with issuing false medical bills and reports to attorneys and entering into illicit and illegal schemes and agreements with attorneys whereby false and fraudulent medical bills and reports were prepared and submitted. Evidence showed bills on the doctor's stationery, signed by him, for patients he had never seen. Although the doctor claimed that the signatures were forged and that he had been duped by the attorneys, his explanation did not have to be accepted.

Burns v. Board of Regents of the University of New York, 233 N.Y.S. 2d 927 (N.Y., Nov. 21, 1962).

Workmen's Compensation Benefits Lost through Failure of Doctor to Report—An employee injured in an industrial accident

was entitled to be treated by a physician of his own choice under the Florida Workmen's Compensation Act, but he lost the right to compensation for the physician's services when the physician failed to file medical reports with the Industrial Commission. An order allowing compensation for the physician's fees was reversed by the Florida Supreme Court.

The employee had been blown into the air by an explosion of dynamite. In addition to physical injury, he suffered a disabling anxiety complex. The doctor admitted that he knew from the beginning that the patient was a workmen's compensation case and that he made no effort to determine who the employer and the insurance carrier were. His only explanation for failure to file the reports was that "no one asked me to." The court held that there was no showing of good cause sufficient to excuse the filing of the reports.

Oolite Concrete Co. v. Carver, 145 So. 2d 733 (Fla., Oct. 17, 1962). ◄



"Good heavens, Humphrey, don't go in the water! Remember you're on a salt-free diet!"

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ABSTRACTS

BOOK REVIEWS

QUINONES IN ELECTRON TRANSPORT

Ciba Foundation Symposium edited by G. E. W. Wolstenholme and C. M. O'Connor. Little, Brown & Co., Boston, Mass., 1960. 453 pages. Illustrated. $11.00.

Water soluble vitamins such as thiamine, nicotinic acid, pyridoxine and others have been easier to handle and so have had their mysteries probed before the more complex lipid soluble complexes were tackled. Present-day technics are proving their worth in the chemical isolation and structural elucidation of such substances as vitamins K, Q_{10} and related, still thought of as esoteric, substances.

The quinoid nucleus has been elucidated precisely and the side chain composed of isoprenoid units has been brought down to the level of comprehension possessed by the average sophomore medical student. The exact relation of K to the clotting mechanisms is still mostly inexplicable (and, therefore, confusing) but much progress is being made here, also.

The extraordinarily complicated picture of the enzymatic sequence sitting on the ribosomes of the mitochondria and constituting a sort of bucket brigade in charge of the electron transference during photosynthesis and other similar energy alterations still needs a LOT of clarification. It is good to know that ubiquinone is about the ninth or tenth of the necessary twenty enzymes involved in this most basic life phenomenon. Someday—and much sooner than most of us dare hope—the entire mystery will have been solved and our next generation of physicians will learn about it in their biochemistry courses.

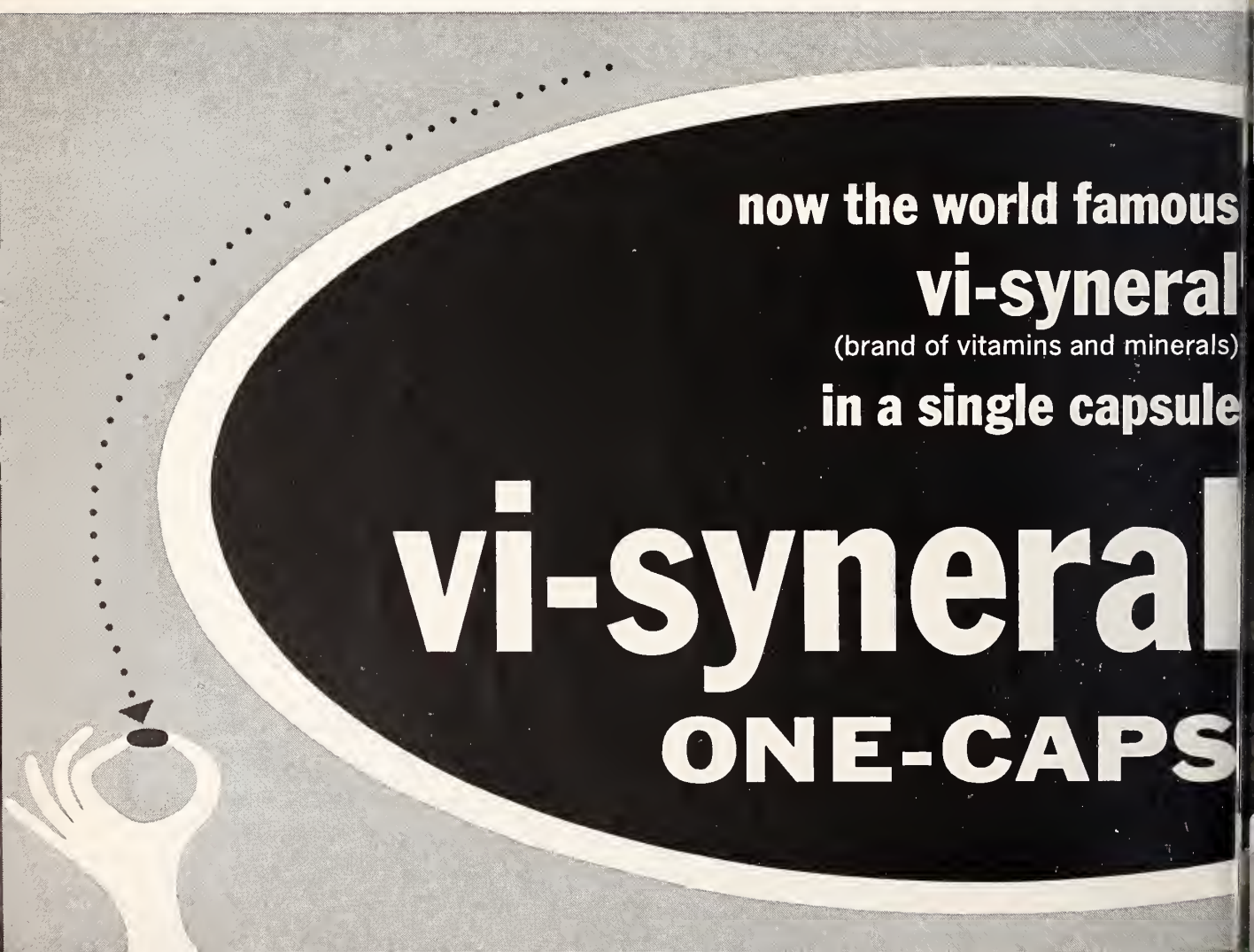
Until that day arrives, the present symposium can be recommended only for those hardy souls thirsting to explore the very outermost perimeters of present-day knowledge. The binding, printing and format is a continuing testimonial to the worth of the Ciba Foundation endeavors.

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

PRIMER OF CLINICAL MEASUREMENT OF BLOOD PRESSURE

George E. Burch, M.D., and Nicholas P. De Pasquale, M.D., indexed, 120 pp. and bibliography. The C. V. Mosby Co., St. Louis, 1962. $5.50.

This is a most interesting booklet, in spite of its



prosaic title. The style is clear and easy to read. Seven chapters are presented covering history of blood pressure recording, physiology (limited chiefly to the physics involved with a short description of the neurohumoral aspects), the technics and apparatus employed in clinical measurement of blood pressure, sources of error, factors affecting arterial blood pressure (15 in number), normal values, and diagnostic applications of blood pressure measurements.

The book fulfills its designation of "primer" by emphasizing the practical throughout, including frank statements of gaps in our knowledge and inadequacies of present-day apparatus. Particular caution is directed to the proper width of the compression cuff, which should be about 20% greater than the diameter of the extremity used for the determination.

The palpatory method is described as being useful in patients with circulatory collapse, where the Korotkoff sounds may be absent or unreliable. (This situation is not too uncommon in post-anesthesia recovery rooms, and your reviewer would suggest this book as required reading for supervisors of such facilities). The auscultatory method is presented, of course, in detail with the aid of clear diagrams and photographs. The flush method for the newborn and infants is succinctly, but adequately, explained.

Sources of error are referred to throughout the work, but in the chapter on this the main points discussed are: faulty technics, defective apparatus, physician error and failure to consider the patient adequately.

From the chapter on normal values it is evident that many of us have too rigid a conception of this basic clinical entity and that all practicing physicians should peruse a report of this sort at frequent intervals, to sweep out the mental cobwebs. The authors are very down-to-earth about this, and this chapter alone plus the bibliography would make this monograph worthwhile.

A. W. CAVINS, M.D.
Terre Haute.

THE MECHANISM OF ACTION OF WATER SOLUBLE VITAMINS

Ciba Foundation Study Group No. 11, edited by A. V. S. de Reuck and Maeve O'Connor, Little, Brown & Co., Boston, Mass., 1961. $2.50. 120 pages.

This study group met in 1961 for a one-day discussion of water soluble vitamins. The liver alco-



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hol dehydrogenase system, pyridoxine, biotin, thiamin and tetrahydrofolate co-factors in one carbon transfer system were discussed.

The diphosphopyridine nucleotide, DPN, has nicotinic acid as its active core. The mechanism of zinc chelation is analyzed mathematically; the easily observable color changes are explained and the role of inhibitors is brought out to show exactly *why* the reaction proceeds in the pathways taken.

The role of pyridoxine, B_6, in the catalysis of aldol reactions is analyzed in the same precise, lucid mathematical manner.

Also, the active form of folic acid is diagrammed in structural formulas rather than mentioned in passing by its usual name, co-factor F. The role of tetrahydrofolic acid as the reductant in methionine synthesis is discussed even as the hybrid position of formic acid as the strongest carboxylic acid $\left(H - C \begin{matrix} = O \\ - OH \end{matrix}\right)$, and as aldehyde $(HO - \overset{H}{C} = 0)$, is stressed.

The other vitamins are discussed in similar, terse, highly technical expositions. This is an almost too brief, most advanced type of presentation by biochemical research experts of their findings for criticism by their peers. Very few, if any, practicing physicians will have either the patience or the knowledge to peruse this booklet for intellectual profit.

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Abstracts From Various Literature, Prepared by AMA

SIDEROCALCIPHYLACTIC SENSITIZATION TO DISTILLED WATER

A special kind of hypersensitivity can be induced by pre-treatment with dihydrotachysterol, followed by ferric dextran given intravenously. During this state distilled water given subcutaneously produces extensive local calcinosis. This action of water appears to depend upon its mastocyte-depleting potency. Under similar circumstances, sodium chloride or glucose in approximately isotonic solutions have very little calcium-precipitating effect, but in highly hypertonic solutions both are as effective as distilled water. The role of this hypersensitivity in clinical calcinosis and its relationship to hypersensitivity resulting from antigenantibody reactions remain to be studied.

Selye, H., Dieudonne, J.-M., Tuchweber, B.: Siderocalciphylactic Sensitization to Distilled Water, *Arch. Intern. Med.* 110:290, Sept., 1962.

PROLONGED USE OF ORAL NEOMYCIN IN PREMATURE INFANTS

Several studies were undertaken in the premature nursery of Baltimore city hospitals to ascertain the safety of prolonged therapy with neomycin in the newborn period. Although the prophylactic use of neomycin was associated with a reduction in the incidence of diarrhea as compared with the control group, it was not associated with any shortening of the average time required for these prematurely born infants to reach discharge weight. Evidence was found that oral administration of neomycin to prematurely born infants in adequate dosage, for periods of three weeks during their first month of life, resulted in no detectable abnormalities of serum electrolytes, the BUN, the urinary electrolyte excretion, the osmolality of the urine, or the plasma prothrombin time.

Buetow, K. C., Cheung, Che-Sun, Finberg, L.: Prolonged Use of Oral Neomycin in Premature Infants, *Amer. J. Dis. Child.* 104:252, Sept., 1962.

VENOUS LESIONS DISCOVERED BY DISSECTION OF LIMBS AMPUTATED FOR GANGRENE OF ARTERIAL ORIGIN

In dissecting 33 lower extremities which had been amputated due to fully evolved arterial lesions, the authors established that the deep veins were almost invariably involved. In acute ischemic syndromes, six of seven times the large deep veins

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Continued

were completely and recently thrombosed. In one case there was endophlebitis only. Of 26 limbs amputated because of gangrene due to arteriosclerosis, three manifested old venous thrombosis independent of the arteriopathy, 12 showed recent deep venous thrombosis, and 11 displayed marked, although not obliterating, endophlebitis. In the syndromes of acute ischemia leading to rapid gangrene, the complete venous network was often thrombosed. The authors believe that the products of tissue necrosis which induce a hypercoagulability are responsible for these extensive thromboses. In chronic arteritis, deep venous thromboses do not belong to one particular variety. Cord-like migrating, subcutaneous, superficial thromboses are, on the other hand, specific of thromboangiitis obliterans (Buerger's disease) in which they may precede the first arterial obliteration by several years. As for the deep thromboses found in arteriosclerosis, they are more apt to impair than to improve the prognosis. Medical management of the venous complication, when it is clinically apparent, is included in that of the arteritis. When phlebography has revealed such venous involvement previous to a restorative arterial operation, only in the case of very limited obliteration is a complementary operative act on the adjacent vein justified.

Fontaine, R., Suhler, A., Gangloff, J.-M.: Venous Lesions Discovered by Dissection of Limbs Amputated for Gangrene of Arterial Origin: 33 Case Studies, *Presse. Med.* 70:1385, June 9, 1962.

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Improves gait • Increases Comfort

Available from HANGER is the increasingly popular below-knee Patellar-Tendon Bearing (PTB) Prosthesis, developed at the University of California, Berkeley, with the cooperation of members of the AOPA, representatives of prosthetics schools, and the V.A. Prosthetics Center.

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PENICILLIN IN HOSPITAL MILK SUPPLIES

Penicillin is the main drug concerned in drug sensitivity; the danger is increased by the repeated ingestion of small quantities of the antibiotic in milk. Penicillin is found in milk, because it is given to cows with mastitis, a condition that is very common in modern herds, on which machines are used for milking. Because of its relatively great stability, penicillin remains virtually unchanged through pasteurization, and it has been shown that penicillin cannot be completely destroyed in milk, even by being autoclaved at a pressure of 15 lb. per square inch for 10 minutes. Studies reported revealed that 61% of the milk supply of one Melbourne teaching hospital and 100% of the milk supply of another contained penicillin at a time when such contamination could be expected to be minimal, that is, during the summer, when mastitis in dairy herds was not frequent. The author points out that penicillin can be removed from milk supplies of cities by compelling farmers not to market milk from cows treated with penicillin for mastitis for 72 hours after such treatment.

Rosanove, R.: Penicillin in Hospital Milk Supplies, *Med. J. Aust.* 1:977 (June 23) 1962.

CHLORAMPHENICOL HYPERSENSITIVITY

Hypersensitivity reactions to chloramphenicol have rarely been reported. Most reports deal with hematologic toxicity due to bone marrow depression. In the present case a patient developed severe hemorrhagic diathesis after a small dose (1.0 gm.) of chloramphenicol. There was no laboratory evidence of bone marrow depression, platelet destruction, or other coagulation defects. Positive patch testing and Prausnitz-Kustner reaction (with a normal control series) with biopsy evidence of perivascular infiltration and capillary leakage confirmed the suspicion of allergic purpura from drug sensitivity. Past history included a previous rash following chloramphenicol. Exposure of the patient to a test dose to determine hypersensitivity was neither advisable nor necessary in view of the safer methods available.

Cahill, K. M.: Chloramphenicol Hypersensitivity, *Lancet* (London) 2:277 (Aug. 11) 1962.

REGULATION OF INSULIN IN HUMAN BLOOD

Insulin circulates in human blood both as biologically active "free" insulin and as an inactive complex. Adipose tissue extracts can activate these complexes by dissociating the insulin from such complexes. In fasting nondiabetics, insulin circu-

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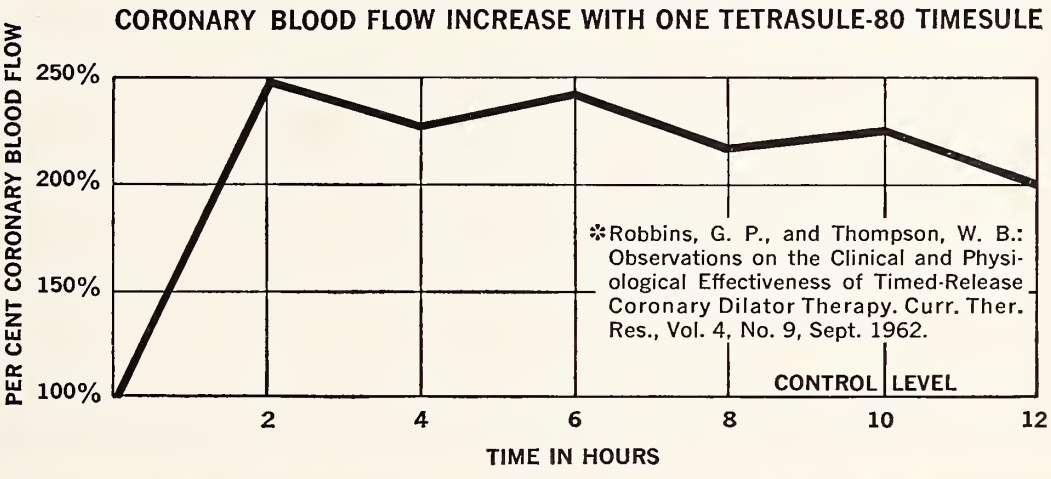
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B.i.d. dosage of Tetrasule Timesules provides continuous protection—all day, all night—including the critical early A.M. hours. This 12-hour protection was confirmed by a recent study of Robbins and Thompson , as demonstrated in the above chart.

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CAUTION: Federal law prohibits dispensing without prescription. Use with caution in glaucoma and severe anemia.

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lates primarily as the inactive complex. A rise in blood glucose "triggers" the dissociation of the insulin complexes. In diabetics, insulin circulates as the inactive complex in amounts comparable to those in nondiabetics. A rise in blood glucose, however, results in the much slower dissociation of the insulin complexes. It is suggested that some cases of diabetes may result from extrapancreatic causes such as a malfunction of the dissociation mechanism of the inactive complex.

Antoniades, H. N., Gundersen, K., Beigelman, P. M., Pyle, H. M., Bougas, J. A.: Studies on State, Transport and Regulation of Insulin in Human Blood, *Diabetes* 11:261 (July-Aug.) 1962.

TRIPARANOL CATARACT

Three male patients, aged six, 37, and 56 years, developed posterior subcapsular cataracts after treatment with triparanol (MER/29). The two younger patients were being treated for hypercholesterolemia, and the older patient had coronary disease. In two patients the cataracts developed eight to 12 months after the drug had been discontinued. Ichthyosis, change in color of hair, and loss of hair were earlier side effects of the drug. Sixteen other patients with milder or no cutaneous reaction have not developed cataracts.

Kirby, T. J. et al.: Triparanol Cataract, *Arch. Ophthal.* 68:486 (Oct.) 1962.

NARGHILE SMOKING IN RELATION TO CANCER OF THE LUNG

A study among different ethnic groups in Israel showed that the lung cancer mortality rate for the immigrants from Europe was eight times as high as that for the immigrants from Yemen despite the fact that the Yemenites were heavier smokers than the Europeans. Seventy-eight percent of the Yemenite smokers were narghile smokers, while 98% of the European smokers were cigarette smokers. Only 7% of the narghile group but 88% of the cigarette-smoking group were inhalers. The fine cigarette tobacco was found to yield more tar than the coarse tobacco (tombac) used in narghile smoking. The efficiency of the narghile water filter was not appreciably higher than that of a cigarette filter tip. The findings of this study are compatible with the assumption that mainly differences in inhaling account for the fact that the lung cancer death rate in the narghile smoking population is significantly less than among the cigarette-smoking group.

Rakower, J., Fatal, B.: Study of Narghile Smoking in Relation to Cancer of the Lung, *Brit. J. Cancer* 16:1 (March) 1962. ◄

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Letters

to the editor

January 4, 1963

To the Editor:

An excellent opportunity exists for a young American general practitioner with an interest in surgery, to work with the famed Burma surgeon, Dr. Gordon S. Seagrave, at his 250-bed hospital in Namkham, Burma.

Minimum appointment is for two years. With satisfaction, an extended tenure would be encouraged.

The candidate should be an American citizen of any race or religion but his age should not exceed forty. He may be married or single. If married to a trained nurse, there would be an important place for her in the nurses' training program; or to a school teacher, an opportunity to teach in the secondary school on the hospital compound.

Extensive experience is not a requirement but graduation from an "A" class medical school is. Professional practice at the Namkham Hospital is intensive, widely varied and often rare to Western medical experience.

The candidate must be prepared to leave for Burma not later than the spring of 1963, or sooner if possible (depending upon issuance of his visa) so that his appointment can overlap that of the American doctor now serving the program.

This appointment offers a modest salary per annum. Travel expenses and Western style housing will be provided.

Anyone interested should please write: American Medical Center for Burma, Inc., 6 Penn Center Plaza, Philadelphia 3, Penn., stating qualifications, etc.

Sincerely yours,
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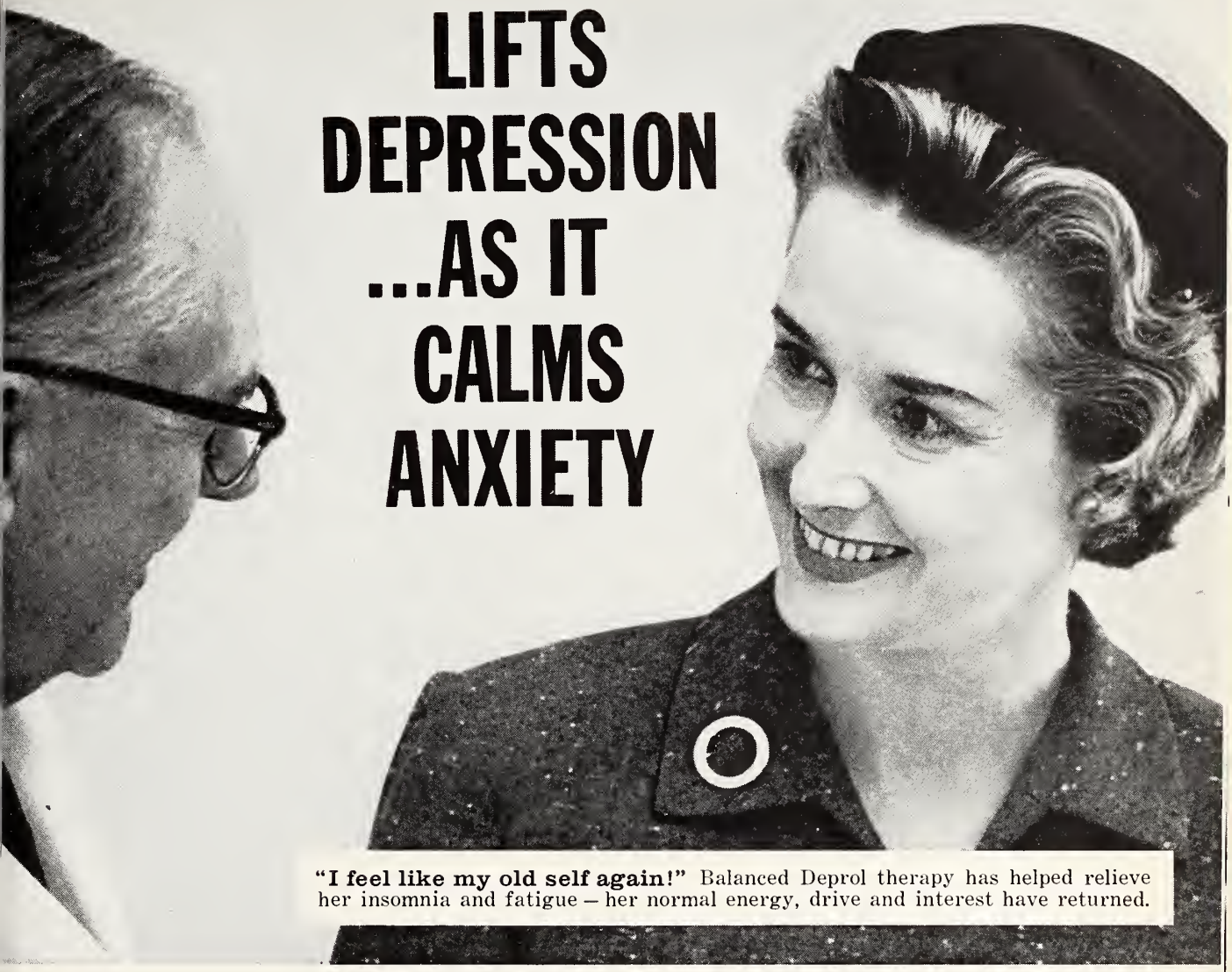
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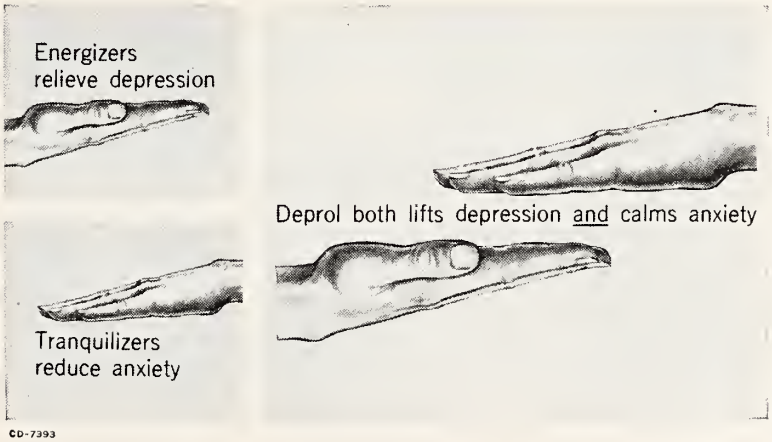
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A review of the following table of Blue Shield operational data covering the 16 years of the plan's existence shows continuing growth and continuing economy of operation. In 1962 new records were established in the total number of members, the amount paid for member's doctor bills, the volume of medical claims, as well as low-cost operating efficiency.

	Enrollment At Year End	Number Of Claims	Payment For Doctor's Services	Operating Percent
1946	80,568	540	$ 32,021	30.9%
1947	141,293	5,780	421,479	16.4
1948	232,103	14,191	872,986	15.4
1949	364,550	27,068	1,430,854	14.0
1950	539,712	47,613	2,418,466	12.8
1951	729,897	78,752	3,791,691	13.7
1952	871,726	109,897	5,041,642	11.6
1953	989,344	144,016	6,064,876	12.3
1954	1,059,837	171,013	6,681,876	12.5
1955	1,267,994	209,510	7,945,040	11.1
1956	1,355,097	291,080	11,148,990	9.9
1957	1,396,368	368,470	13,753,780	9.7
1958	1,306,181	390,975	13,730,466	9.6
1959	1,363,882	427,149	14,477,628	9.8
1960	1,391,624	463,057	15,752,605	9.0
1961	1,431,251	514,991	17,957,496	8.3
1962*	1,469,670	587,213	20,721,436	7.2

* 1962 figures before final audit.

GRAND TOTALS

1946 Through December 1962

Total Payments for Doctors' Services since September, 1946	$142,200,294
Add Outstanding	2,520,043
Total Claims Expense through December 31, 1962	$144,720,337
Earned Income	$169,474,686
Reserve—December 31, 1962	$ 7,695,527
Total Claims Paid for Members since September, 1946	$ 3,851,315

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SPECIALISTS

Thomas D. Geracioti, 2023 N. Lexington St., Arlington, Va.—*Internal Medicine with special attention to Endocrinology*

Ronald G. Blackman, 1073 Hubert Rd., Oakland, Calif.—*Orthopedics*

Harry Suprun, 98-31 65th Rd., Forest Hills, Queens, N. Y.—*Pathology*

Jack A. Henderson, 5915 Orchard Ave., Parma, Ohio—*Pediatrics*

Leroy K. Berryhill, 1520 Broadway, Iowa City, Iowa—*Psychiatry*

Samual J. Mackall, 8606 Patton Rd., Philadelphia, Pa.—*Neurosurgery.*

Alfred Heilbrunn, 7709 Colonial Dr., Prairie Village, Kans.—*General and Thoracic Surgery*

Mehendra N. Tandon, 221 Chase St., Charlotte, N. C.—*General Surgery*

Edmond R. Henelt, 829 Frank, Flint, Mich.—*General Surgery*

Raymond J. March, Apt. C-114, 8350 11th Ave., Burnaby, B. C., Canada—*General Surgery*

William J. Roth, 1160 Eastmore S. E., Grand Rapids, Mich.—*Ob-Gyn*

John L. Rinella, 23316 Edsel Ford, St. Clair Shores, Mich.—*Ob-Gyn*

William R. Otis, 3159 Mission Village Dr., San Diego, Calif.—*Radiology*

George B. Perlstein, Veterans Administration Hospital, Des Moines 8, Iowa—*Urology*—available February, 1964

Edward Z. Tarabulcy, 400 East 34th St., New York 16, N. Y.—*Urology*

ADDITIONAL LOCATIONS

Bartholomew County — HOPE — population 1,500 with a township population of 2,800. Located 43 miles southeast of Indianapolis and 12 miles northeast of Columbus, Indiana where hospital facilities are available. No physician in the community. Contact Mr. S. E. Huffer, Irwin Bank and Trust Company or Mr. T. R. Frank, both of Hope, Indiana.

Boone County — ZIONSVILLE — Wanted young M.D., for general practice at Zionsville. Population about 1,800, 14 miles from hospitals of Indianapolis or 100-bed county hospital at Lebanon, Indiana. Fast growing town, wonderful opportunity. Call or write Greater Chamber of Commerce of Zionsville or L. S. Bailey, M.D., 95 East Oak Street, Zionsville.

Daviess County — WASHINGTON — population 11,000. County hospital located in town. Openings for general practitioners, internists and pediatricians. For further information contact Dr. Robert Rang, 1312 Bedford Road, Washington, Indiana.

Vermillion County — CAYUGA — population 1,200 with a surrounding area of 4,000. Hospitals located at Clinton, Indiana and Danville, Illinois—25 miles away. Two close-by communities have lost physicians by death within a short time. Civic organizations of Cayuga, Newport and Perrysville are interested in finding a physician for Cayuga. For further details contact Mrs. Karl Belser, Jr., R. R. No. 1, Cayuga, Indiana. ◄

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Indiana University Medical School Alumni Day Scheduled for May 8

The Indiana University Medical School Alumni Day will be held May 8 this year at the I. U. Medical Center, according to Dr. Olga Bonke Booher, president of the Alumni Association.

The one-day conclave will begin at 10:30 a.m. in Emerson Hall, 1100 W. Michigan Street. (All times are EST.) Dr. Elvis J. Stahr, jr., president of Indiana University, will be the principal speaker.

The business meeting will begin at 11:30 a.m. and luncheon is to be served at 12:30 p.m. under the big tent south of Riley Hospital. Class pictures will be taken following the luncheon.

Summer Camp for Diabetic Children Will be August 4-23 at Martinsville

The Summer Camp for Diabetic Children will be conducted for the ninth year under the auspices of the Indianapolis Diabetes Association from August 4th through August 23rd this year at Camp James Whitcomb Riley, Bradford Woods, Martinsville.

Boys and girls from eight through 16 years of age are eligible. Rates for summer camp are $150 or are arranged in accordance with individual circumstances.

As in previous years, the camp will be staffed by two resident physicians, two nurses, a dietitian and assistants, a laboratory technician, and the regular counseling and domestic staff of the camp.

Applications may be obtained from, and inquiries should be directed to: Indianapolis Diabetes Association, 821 Hume Mansur Bldg., Indianapolis 4, Ind.

Dr. John A. Campbell, of Indianapolis, was a guest speaker at the 15th Radiological Conference of the Los Angeles Radiological Society on February 2nd and 3rd. He discussed the uses of cineradiography and read a paper on "Roentgen Differentiation of Congenital Right to Left Shunts."

American College of Physicians Honors 14 Indiana Doctors

Fourteen Indiana physicians have been honored by the American College of Physicians. Dr. William E. Symon of Bluffton; Drs. Gordon T. Herrmann and William F. Walker of Evansville; Dr. Wei-Ping Loh of Gary; Drs. Roy H. Behnke and Ivan F. Bennett of Indianapolis and Dr. Herbert Frank of South Bend were designated as Fellows of the College.

Elected as Associates were: Drs. Robert W. Ewer and Melvin L. Faw of Evansville; Drs. Philip A. Christiansen, John A. Galloway, Richard C. Powell and Joseph C. Ross of Indianapolis and Dr. Joseph H. Richardson of Marion.

Dr. James C. Katterjohn of Indianapolis was made a Fellow of the American College of Radiology at its recent annual meeting on February 8.

Dr. James M. Hundley, a native of Summitville and a graduate of the Indiana University School of Medicine, has been named assistant surgeon general of the United States. ◄

FUTURE MEETINGS, SEMINARS, COURSES

Seminar on Premature Care Set for April 4 at Cincinnati Hospital

A Seminar on Premature Care will be held at the Good Samaritan Hospital, Cincinnati, Ohio, on April 4. The one-day meeting will include presentations and discussions, including question and answer sessions, on many topics. There are no registration fees, but interested physicians should contact Dr. Donald J. Frank, at the Good Samaritan Hospital, before April 1.

American Rhinologic Society to Conduct "Nasal Septum" Course

The American Rhinologic Society will conduct a course in "Expanded Surgery of the Nasal Septum and Closely Related Structures" at the Medical College of Virginia, in Richmond on April 28 to May 1. Dr. Charles B. Sputh of Indianapolis will be a member of the instructional staff.

Annual Otolaryngologic Assembly Offers Intensive Postgrad Course

The Department of Otolaryngology of the University of Illinois will offer an intensive postgraduate basic and clinical course October 5 to 11, 1963.

Panel sessions have been designed to emphasize otologic and reconstructive surgery, tumors of the head and neck, otoneurology and audiology. Luncheon chats with question and answer periods are held daily. Write to Department of Otolaryngology, 1853 W. Polk St., Chicago 12.

University of Kentucky Medical Center Sets Clinical Cardiology Course

The University of Kentucky Medical Center announces a course in Recent Advances in Clinical Cardiology to be given at the College of Medicine in Lexington, Kentucky on May 9-10-11. This will be a two and a half day course with exercises in electrocardiography and phonocardiography, lectures, problem case presentations, panel discussions and CPC's. The fee is $15.00 for the two and a half day course.

Information and registration may be obtained by writing to Nicholas J. Pisacano, M.D., Director, Continuation Medical Education, University of Kentucky Medical Center, Lexington, Kentucky. ◄

Academy of Physical Medicine And Rehabilitation Sets Meeting

The Annual Meeting of the American Academy of Physical Medicine and Rehabilitation will be held on August 26, 1963 at the Sheraton-Dallas Hotel, Dallas, Texas. Information may be obtained by writing Dr. Max K. Newman, 30 N. Michigan Ave., Chicago 2.

Postgraduate Course on Trauma Offered April 24-27 in Chicago

The Seventh Postgraduate Course on Trauma will be conducted in Chicago by the Chicago Committee on Trauma of the American College of Surgeons, at the John B. Murphy Auditorium on April 24 to 27. The course is acceptable for 31½ hours of Category II credit by the American Academy of General Practice.

The registration fee is $75.00; residents and interns will be admitted by a letter from their chief of service. Write Dr. John J. Fahey, 1791 Howard St., Chicago 26.

Cleveland Educational Clinic Offers Postgraduate Course in Anesthesiology

The Cleveland Educational Foundation announces a postgraduate continuation course entitled "A Decade of Progress in Anesthesiology" April 17 and 18.

Registration fee is $30.00 except for residents and interns, who will be admitted free by prior arrangement when space is available. Further information may be obtained by writing the Education Secretary, Cleveland Clinic Educational Foundation, 2020 E. 93rd St., Cleveland 6. ◄

INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—January, 1963

Disease	Jan. 1963	Dec. 1962	Nov. 1962	Jan. 1962	Jan. 1961
Animal Bites	235	397	526	283	212
Chickenpox	1132	754	367	531	693
Conjunctivitis	67	103	85	105	61
Diphtheria	0	1	0	0	0
Dysentery, Unspecified	533	65	46	66	12
Impetigo	67	88	151	119	62
Infectious Hepatitis	41	71	55	123	123
Infectious Mononucleosis	26	21	20	24	35
Influenza	1314	1329	1351	5298	584
Measles (Rubeola-Rubella)	654	234	140	359	562
Meningitis, Meningococcal	9	2	2	2	2
Meningitis, Other	4	12	10	4	2
Mumps	503	153	188	368	343
Pertussis	49	68	72	3	12
Pneumonia	245	167	148	203	196
Poliomyelitis	0	3	4	2	0
Streptococcal Infections	642	436	321	555	541
Tinea Capitis	28	33	12	9	7
Tuberculosis (Active)	118	96	110	92	Not Available

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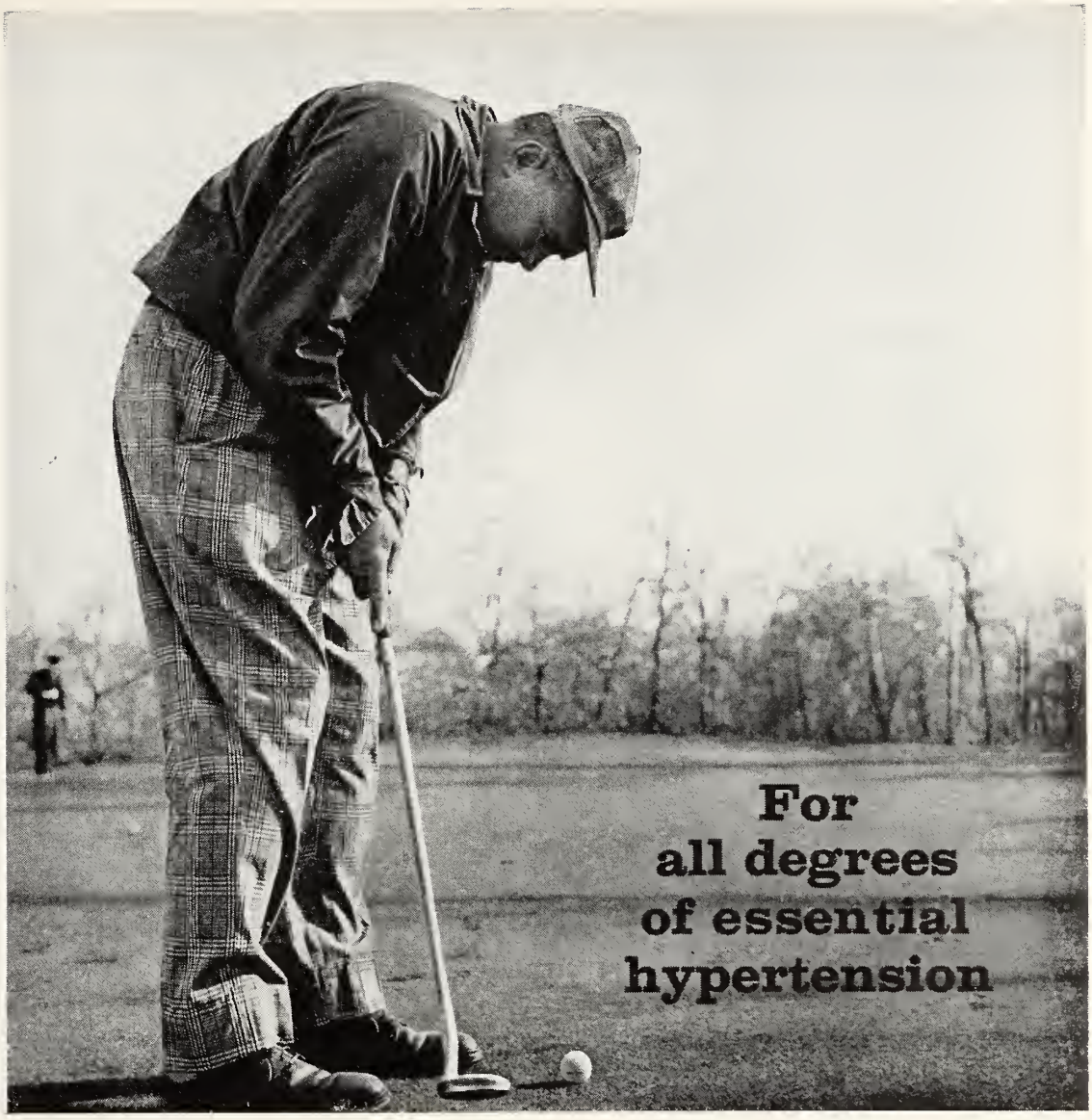
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†Hutchison J. C.: Current Therap. Res. *2*:487 (Oct.) 1960.

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Deaths

Alfred Ellison, M.D.

Alfred Ellison, M.D., 66, former President of ISMA and a member of many association committees, died February 12 at his home in La Jolla, California. He retired in 1956.

Dr. Ellison, a noted surgeon in South Bend, was a member of the St. Joseph County Medical Society. A 1924 graduate of I. U. School of Medicine, Dr. Ellison was chief of the surgical staff at Memorial Hospital in South Bend; on the executive staff at St. Joseph Hospital and on the surgical staff at South Bend's Healthwin Hospital.



President of his county society in 1933, Dr. Ellison was an AMA delegate from 1952-1956, member of the Council from 1939-1949 and again in 1954. He was chairman of the Council from 1947-1949, and a member of the Executive Committee from 1947-1951.

He served on many ISMA committees, including those to Study Cultists and Irregular Practitioners (1938-1943); Committee on Industrial Health (1944); Medical Relief Committee (1944-1946); Committee on Budget (1947-1949); ex-officio, Committee on Medical and Nursing School Scholarships (1947-1951); ex-officio, Committee on Indiana Inter-Professional Health Council (1947-1951); Committee on Medical Education and Hospitals (1953) and the Committee on Anti-National Health Insurance (1954).

Parvin M. Davis, M.D.

Dr. Parvin M. Davis, New Albany physician and surgeon, died Jan. 30 in the Kentucky Baptist Hospital.

Dr. Davis, 66, was a member of the Floyd County Medical Society. He was graduated from the University of Cincinnati College of Medicine in 1921, and was on the staffs of St. Edward and Floyd Memorial hospitals in New Albany. ◄

County, District News

Allen

Dr. Walter L. Palmer, Chicago, Ill., spoke on "Functional Disorders of the Digestive Tract" before the Jan. 8 meeting of the Allen County Medical Society. There were 110 members attending. The society approved setting up a tumor detection center in other action.

Bartholomew-Brown

Thirty members attended the Jan. 9 meeting of the Bartholomew-Brown County Medical Society. The society began making preparations for participation in the Science Fair and organization of committees for this year.

Boone

Dr. Clarence G. Kern, Lebanon, has been elected president of the Boone County Medical Society and Dr. Don W. Boyer, Lebanon, secretary-treasurer. Mr. Erickson spoke on the use of the Burdick Dual Defibrillator and Pacemaker at the Jan. 8 meeting of the society.

Carroll

"A Case Report on Recurrent Paraganglioma First Discovered During Pregnancy" was the topic of Dr. Robert M. Seese, Delphi, when he spoke before the Jan. 16 meeting of the Carroll County Medical Society. Eight members attended. Dr. George W. Wagoner has been elected president of the society for the coming year and Dr. Seese will serve as secretary-treasurer. Dr. T. Neal Petry was named delegate and Dr. Wagoner, alternate. All of the new officers are from Delphi.

Cass

The Cass County Medical Society met Jan. 7 to hear Dr. Marian Hochhalter, Logansport, discuss "Travels in Japan." There were 20 members present.

Clinton

Appointing committees and discussing the program for the coming year comprised the main business at the Jan. 21 meeting of the Clinton County Medical Society. Thirteen members attended.

Dearborn-Ohio

Dr. J. M. Pfeifer, Lawrenceburg, will serve as the 1963 president of the Dearborn-Ohio County Medical Society. Dr. J. K. Jackson, Aurora, was elected secretary-treasurer. Delegates will be Drs. L. M. Baker and Gordon Fessler. Alternate will be Dr. Ivan Lindgren, Lawrenceburg. The society met Jan. 10 for a business meeting. Fifteen members attended.

Decatur

New officers of the Decatur County Medical Society are: Dr. James Miller, president; Charles Overpeck, secretary-treasurer; William Shaffer, delegate and Robert Acher, alternate.

DeKalb

Dr. John H. Hines has been elected president of the DeKalb County Medical Society. Dr. John C. Harvey will assist him as secretary-treasurer. Dr. H. V. Hippensteel spoke on "New Drugs Introduced in 1962" at the Jan. 17 meeting of the group. Ten members attended.

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Fayette-Franklin

William Furrow, professional representative of the Ames Company, Inc., discussed "Phenylketonuria" with the 12 members of the Fayette-Franklin County Medical Society at its Jan. 15 meeting. A PKU program will be set up in the county via the health department. Dr. George M. Ellis, Connersville, has been elected 1963 president of the group. Other new officers include: Drs. J. L. Steinem, Connersville, secretary-treasurer; G. T. Watterson and H. N. Smith, delegates, and W. F. Kerrigan and Perry F. Seal, alternates.

Floyd

Dr. Karl Meyer, spoke on "Medical Experiences in Nigeria" at the Jan. 14 meeting of the Floyd County Medical Society. Twenty members attended the meeting.

Gibson

New officers of the Gibson County Medical Society are: Drs. James F. Peck, president; William Wells, secretary-treasurer; R. S. McElroy, delegate, and Virgil McCarty, alternate. All of the officers are from Princeton.

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Greene

Dr. Robert E. Moses, Worthington, has been chosen president of the Greene County Medical Society. Other new officers include: Drs. Harry Rotman, secretary-treasurer; Sam Rotman, delegate, and Jerome A. Graf, alternate.

Hamilton

Dr. John G. Haywood, Noblesville, is the newly elected president of the Hamilton County Medical Society. Secretary-treasurer will be Dr. Malcolm D. Long, Indianapolis.

Hancock

Dr. Donn R. Hunter, Greenfield, is the new president of the Hancock County Medical Society. Other new officers are: Drs. Ted C. Kirby, secretary-treasurer; Wayne H. Endicott, delegate, and John H. Smith, alternate.

Howard

The Howard County Medical Society has chosen Dr. Max M. Earl as president and Dr. Robert L. Michael, secretary-treasurer, for the coming year.

Jackson-Jennings

New officers for the Jackson-Jennings County Medical Society are: Drs. Ian S. Templeton, president; Forrest D. Ellis, vice-president; and Kenneth E. Bobb, secretary-treasurer.

Jay

The Jay County Medical Society met Jan. 2 with eight members present. Dr. Ralph E. Schenck has been re-elected president and Dr. Joseph F. Vormohr, secretary of the county society.

Lake

Dr. John P. Bordzell has been chosen president of the Lake County Medical Society and Dr. Robert J. Milos, secretary-treasurer.

Madison

Dr. R. R. Reed has been chosen to head the Madison County Medical Society for the coming year. Other new officers are: Drs. D. G. Jones, secretary-treasurer; J. L. Larmore and P. T. Lamey, delegates, and W. A. Laudeman and S. W. Ellis, alternates.

Miami

President of the Miami County Medical Society for the coming year will be Dr. James U. Guthrie, Peru. Dr. Cloyn R. Herd, Peru, will be secretary-treasurer; Dr. Lloyd Hill, delegate, and Dr. Guthrie, alternate.

Montgomery

Drs. Fred M. Blix and Wesley E. Shannon have been re-elected president and secretary-treasurer respectively of the Montgomery County Medical Society. Serving as delegate will be Dr. Richard R. Eggers, and Dr. Fred N. Daugherty, alternate.

Morgan

Congressman William G. Bray discussed "Political Pressure for Medicare" at the Jan. 27 meeting of the Morgan County Medical Society. Thirteen members attended. Dr. Robert J. Miller, Paragon, has been elected secretary of the group.

Parke-Vermillion

Drs. Robert M. Fell and Ivan L. Gailey have been chosen delegates and Drs. Richard S. Bloomer and Lawrence C. Webb, alternates, from the Parke-Vermillion County Medical Society.

Perry

Dr. Bernard P. Kemker, Tell City, has been chosen president of the Perry County Medical Society. Other new officers include: Drs. Robert G. Gilbert, secretary-treasurer; Fred Smith, delegate, and John M. James, alternate.

Posey

Newly elected officers of the Posey County Medical Society are: Drs. L. John Vogel, president; Herman Hirsch, secretary-treasurer; Frank W. Oliphant, delegate, and Carroll Boyle, alternate.

Ripley

Dr. R. Lee Smith has been elected president of the Ripley County Medical Society; Dr. William J. Warn, secretary-treasurer, and Dr. Bill E. Frieland, delegate.

Shelby

Dr. Lucian A. Arata, Shelbyville, has been selected president of the Shelby County Medical Society. Assisting him will be: Drs. P. M. Inlow, secretary-treasurer; P. R. Tindall, delegate, and W. L. Dalton, alternate. Paul Nicoll, Ph.D. from the department of physiology, Indiana University, spoke on "Pakistan" at the Jan. 16 meeting of the society. There were 36 members present.

Spencer

Dr. Michael O. Monar is the new president and delegate of the Spencer County Medical Society. Dr. John C. Glackman will serve as secretary-treasurer and alternate.

Washington

Dr. Roy L. Fultz, Salem, is the newly elected president of the Washington County Medical Society. Other officers are: Drs. Charles B. Carty, vice-president; Irvin E. Huckleberry, secretary-treasurer; Dr. Fultz, delegate, and Dr. Carty, alternate.

Wells

Dr. Charles E. Jackson, Bluffton, has been elected president of the Wells County Medical Society. Other new officers are: Drs. S. B. Kephart, vice-president; John F. Phillips, secretary-treasurer; Truman E. Caylor, delegate, and Pierre C. Talbert, alternate.

White

New officers of the White County Medical Society are: Drs. W. W. Houser, president; N. A. Hibner, vice-president, and W. V. Morris, secretary-treasurer. All of the new officers are from Monticello.

Whitley

Dr. John Langohr is the newly elected president of the Whitley County Medical Society. Assisting him will be Otto Lehmberg, secretary-treasurer. Both are from Columbia City. ◄

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Association News

EXECUTIVE COMMITTEE

January 19, 1963

Present: Wendell E. Covalt, M.D., chairman; Ralph V. Everly, M.D.; Maurice E. Glock, M.D.; Don E. Wood, M.D.; Kenneth O. Neumann, M.D.; Irvin W. Wilkens, M.D.; Ottis N. Olvey, M.D.

Frank B. Ramsey, M.D.; Robert Hollowell, attorney, and James A. Waggener, executive secretary.

Membership Report:

Number of members as of December 31, 1961		4,345
1962 members as of December 31, 1962:		
Full dues paying	3,719	
Residents and interns	164	
Council remitted	42	
Senior	365	
Honorary	3	
Military	47	
Total 1962 members as of December 31, 1962		4,340
Number of members as of December 31, 1961		4,345
Loss over last year		5
Number of AMA members as of December 31, 1962		4,214
Total 1961 AMA members as of December 31, 1961		4,221
Loss over last year		7
1962 AMA members: Dues paying	3,591	
Exempt, but active	623	
		4,214
Number who have paid state dues but not AMA dues for 1962		126
1963 members as of January 17, 1963:		
Full dues paying	1,118	
Residents and interns	64	
Council remitted	19	
Senior	326	
Honorary	3	
Military	42	
		1,572
1963 AMA members as of January 17, 1963:		
Dues paying	1,113	
Exempt	447	
		1,560

Annual Convention, French Lick, October 7-10, 1962

Actions of the House of Delegates, referred to the Executive Committee, were discussed.

a. Regarding the employment of personnel to carry on the duties of the Commission on Voluntary Health Agencies, on motion of Drs. Wood and Everly the secretary was to talk with the chairman of the commission and attempt to prepare an outline of what the field men could do in carrying out this request.

On motion of Drs. Wood and Wilkens, the secretary was requested to contact the secretary of the State Board of Health to ascertain if the state board has funds available for this purpose.

b. Resolutions Nos. 2 and 7 as adopted by the House of Delegates were referred to the Council on motion of Drs. Glock and Neumann. By consent it was also agreed that the Council was to be requested to establish a liaison committee of the Council with the State Board of Medical Registration and Examination.

Annual Convention, Indianapolis, October 15, 16, 17, 1963

The committee reviewed the tentative outline of the program for the annual convention in 1963 and also the results of the questionnaire sent to the entire membership by the Commission on Convention Arrangements. No action was taken.

Headquarters Office

a. A letter from the Indiana National Bank concerning a proposal to establish a student loan program for medical students with the association guaranteeing the loans was reviewed. Upon motion of Drs. Wilkens and Neumann, this is to be referred to the Council with the recommendation to the Council that they in turn recommend to the House of Delegates that the portion of the dues currently being collected for AMEF be diverted for the purpose of establishing such a program.

b. The secretary read a communication from the American Medical Association concerning the AMA-ERF program. This was accepted as information.

c. A letter from the Ohio State Medical Association and a copy of a bill adopted by the state of Ohio in which the state established a guaranteed loan program were reported on for the information of the committee.

Building Matters

Dr. Everly reported on the activities of the Building Committee. He discussed the suggestion he had received concerning the installation of a humidification system in the building. This subject was also discussed by Dr. Wood. Upon motion of Drs. Olvey and Glock, the architects are to be requested to provide an estimate and a method of humidifying the building. Dr. Wood is to discuss this with Mr. Simmons.

Treasurer's Office

The treasurer discussed the annual audit for the year ending September 30, 1962, the financial statements for November and December, 1962, and the auditor's quarterly report for September through December, 1962. On motion of Drs. Wood and Neumann, the treasurer's report was adopted.

Legislative Matters

National:

Dr. Wood reported extensively on the AMA policy positions and on several bills currently before the Congress.

The committee was handed a copy of a statement which had been adopted by the Pennsylvania State Medical Society concerning relations between medicine and osteopathy.

Local:

The report of the Commission on Inter-Professional Relations concerning pharmacists filling prescriptions written by podiatrists was reviewed for the information of the committee.

Also reviewed was the request that the association oppose the imposition of a sales tax on prescription items. On motion of Drs. Glock and Everly, the Executive Committee instructed the Commission on Legislation to oppose this proposal.

Legislation currently before the state legislature was discussed such as the request for chiropractors to be authorized to excuse students from physical education, and the corporate practice bill. The secretary pointed out that the Commission on Legislation would like the Executive Committee's interpretation of the action of the House of Delegates on this latter matter. On motion of Drs. Glock and Everly, it was voted that the association would support a corporate practice bill providing it met all the criteria as laid down by the House of Delegates but the association would not take the initiative in introducing such a bill. It was suggested that the Hammond Clinic group be written reporting this fact.

A memorandum from the Indiana University Medical Center concerning changes in regulations for medical licensure was reviewed. This brought about a discussion of the failure of the Commission on Medical Education and Licensure to have an organization meeting, and the president instructed the secretary to send a letter to the commission members over his signature calling a meeting of this commission for the purpose of organization and beginning of their year's work.

Organization Matters

The request of the Indiana Academy of General Practice for use of the mailing list was approved on motion of Dr. Neumann, taken by consent.

Recommendation for appointment of a physician as a member of the Advisory Council for Mental Health was read. Upon motion of Drs. Neumann and Glock, the association is to recommend the appointment of Dr. Wallace R. Van Den Bosch of Lafayette.

A letter requesting the association to support a candidate's election for membership on the board of directors of the United States Chamber of Commerce was accepted as information, no action being taken.

A letter received from the American Medical Association concerning the recommendation for appointment of a medical reserve officer as a state liaison officer between the office of the Surgeon General, Department of the Air Force, and the Indiana State Medical Association was reviewed. Upon motion of Drs. Everly and Wilkens, Dr. Maurice I. Marks of Indianapolis is to be recommended.

A letter from the Indiana State Chamber of Commerce concerning representation of the association on the Indiana State Chamber Committee on Workmen's Compensation was read and upon motion of Drs. Glock and Wood, Dr. Emmett B. Lamb is to be requested to make a recommendation.

A letter from the Indiana Traffic Safety Foundation, Inc. concerning the association becoming a participating member of the foundation was read and on motion of Drs. Glock and Everly this was not approved.

A letter from the National Society for Medical Research requesting the association to renew its financial support to this organization was read and on motion of Drs. Wood and Wilkens it was voted that this matter be referred to the Commission on Medical Education and Licensure for study and report back to the Executive Committee.

A memorandum from the president of the Woman's Auxiliary to the Indiana State Medical Association concerning the request of the Indiana Youth Power Conference for participation in financial support of this organization was reviewed and on motion of Drs. Wood and Glock, this is to be referred to the Committee on Rural Health for study and recommendation back to the Executive Committee.

Correspondence between Dr. Glock and Dr. E. T. Edwards concerning the implementation of the Reference Committee Report on Insurance was read for the information of the committee.

Bulletin No. 31, dated December 1962, from the Joint Commission on Accreditation of Hospitals, was reviewed for the information of the committee.

A letter from the Indiana Hospital Association requesting the Indiana State Medical Association not to support the Indiana Licensed Nursing Home organization in attempting to establish a statewide accreditation program for nursing homes was discussed. On motion of Drs. Glock and Everly, this matter is to be referred to the Commission on Medical Education and Licensure.

A letter from the Indiana Hospital Association regarding their desire to explore the possibility of developing a "Medic Alert" program in Indiana was read. Upon motion of Drs. Glock and Wilkens, the Hospital Association is to be informed that this idea was turned down by the House of Delegates of the Indiana State Medical Association and that the association currently has a work study in progress concerning the development of a similar type program in the state of Indiana.

A letter from Dr. George R. Burch, president of the Indiana Veterinary Medical Association was read concerning the Michigan Association of the Professions (MAP) and inquiring as to whether the association had given this type of organization any consideration. Dr. Burch is to be informed that there is no action contemplated on the part of the association regarding this program.

Mr. Hollowell reported on the publication from the law department of the American Medical Association concerning tax deferred retirement plans for physicians. Upon motion of Drs. Wood and Neumann the committee voted that *The Journal*

should carry an article on this subject and that the ISMA News Flash also should call attention to the fact that nothing be done on this until the regulations are promulgated by the Internal Revenue Service.

Correspondence from Standard & Poor's, Investment Counsel, New York, concerning a physicians' retirement program was ordered by consent to be referred to the Commission on Special Activities.

AMA matters:

The proposed letter to be sent to the delegates to the American Medical Association announcing the candidacy of Dr. Lester D. Bibler of Indianapolis for election to the AMA Board of Trustees in June was approved by consent.

A letter from the Kentucky State Medical Association announcing the candidacy of Dr. Robert C. Long as a candidate for the vacancy created by Dr. Hugh M. Hussey's retirement from the Board of Trustees was read for the information of the committee.

Additions, corrections and deletions to the AMA House of Delegates Reference Committee reports at the Los Angeles meeting were reviewed for the information of the committee.

Membership matters:

Several questions regarding membership of physicians currently on a resident status were reviewed.

The question as to whether or not the association should have a new rule concerning dues of military members, as to whether those making a career of military service should pay regular state dues, was discussed. The secretary was instructed to request the American Medical Association to state its policy on this type of member.

These matters are to be referred to the Commission on Constitution and Bylaws for its opinion and in order that these questions may be clarified.

A statement from the State Conference on Social Work covering renewal of membership in this organization for 1963 in the amount of $15.00 was approved by consent.

The Journal

Request of the Indiana Association of Medical Assistants for carrying a page ad in *The Journal* of the Indiana State Medical Association was reviewed and Dr. Ramsey is to contact this organization informing them that *The Journal* will be glad to carry an ad but it will be necessary that a charge be made.

The request of the Professional Service Company to purchase advertising space in *The Journal* was approved by consent.

Future Meetings

Notice of the 1963 Aircade for Citizenship Action, sponsored by the U. S. Chamber of Commerce, was reviewed and no representative is to attend this meeting.

January 23-24, 1963—Association of Public Affairs Conference, U. S. Chamber of Commerce, Washington, D. C. No representative is to attend this meeting.

February 1-5, 1963—AMA Annual Congress on Medical Education, Chicago. On motion of Dr. Neumann, taken by consent, the president is to delegate a representative to attend this meeting.

February 5, 1963—AMA Committee on Voluntary Health Agencies, Chicago. The secretary reported that the AMA Committee on Voluntary Health Agencies had agreed to pay Dr. Norman Booher's expenses for appearing before this committee on February 5.

February 8-9, 1963—An invitation to send representatives to the Michigan Association of the Professions 4th Annual Congress in Lansing was not accepted.

February 11-12, 1963—Pharmaceutical Manufacturers Association Central Region Conference, Chicago. Request that the executive secretary attend this meeting was approved by consent.

February 15-16, 1963—AMA Third National Congress on Voluntary Health Insurance, Chicago. The Executive Committee approved Dr. E. T. Edwards attending this meeting.

March 1-2, 1963—AMA Ninth Annual Conference of Mental Health Representatives of State Medical Associations, Chicago. It was voted that Dr. Glen Ward Lee should attend this meeting.

March 8-9, 1963—Medico-legal Symposium, Miami Beach. An invitation for the association to send its legal counsel to this symposium was turned down at the request of the attorney.

March 18-20, 1963—1963 Annual Health Forum, Washington, D. C. An invitation for a representative of the association to attend this meeting was turned down.

There being no further business the committee adjourned to meet again at 5:00 p.m. on Wednesday, February 20, 1963, at the headquarters building. ◄

all things considered

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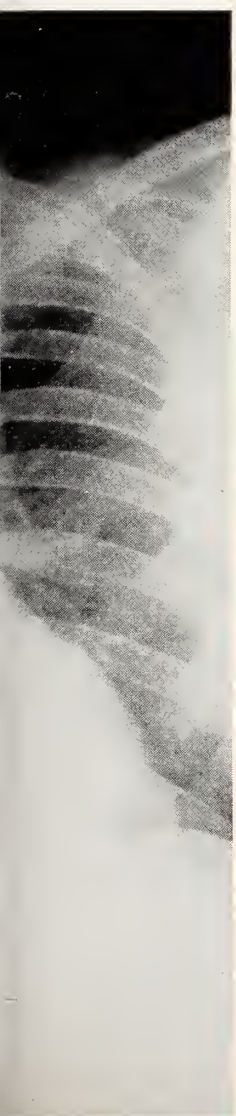
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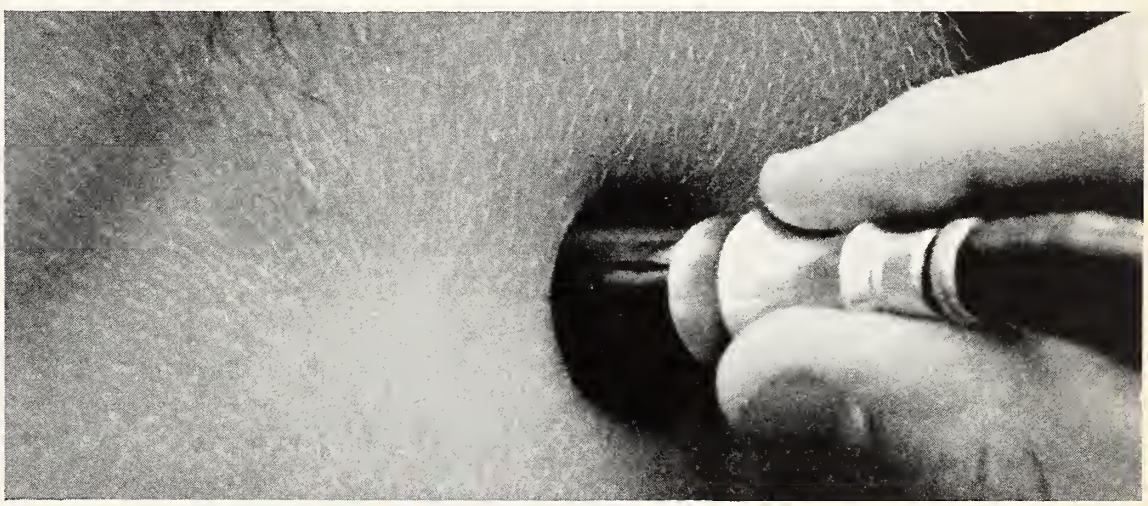
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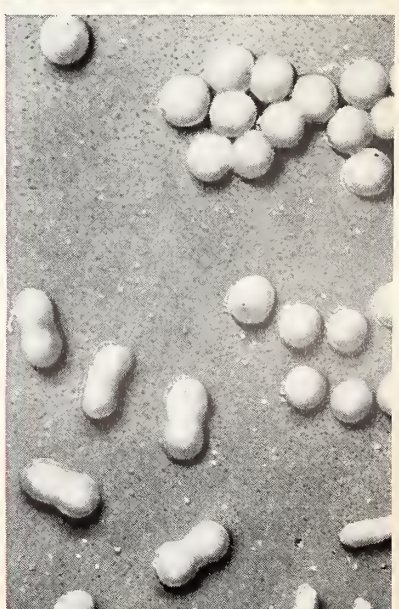
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This summary of what is happening in Washington is prepared by A.M.A.'s Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D. C.—The American Medical Association urged changes in the federal income tax law that would increase allowable deductions for medical expenses of older persons.

Percy E. Hopkins, M.D., Chicago, Chairman of the AMA Board of Trustees, and Francis C. Coleman, M.D., Des Moines, Iowa, Chairman of the AMA Council on Legislative Activities, outlined the association's position before the House Ways and Means Committee.

Most of the amendments proposed by the AMA involve changes in the Internal Revenue Code affecting those 65 and over and persons contributing to their support. These changes include:

--Permission for a taxpayer to deduct, without regard to the amount of support contributed, any medical expense paid for an aged dependent.

--Reduction of the income tax liability of lower income persons among the aged who have large medical expenses.

--Permission for aged taxpayers to receive full tax benefit for medical expenses by use of the carry-forward and carry-back method, just as businesses are presently permitted to do to offset losses in one year against profits in another year.

--Removal of the one percent floor on drugs and medicines for taxpayers 65 and older.

The AMA recommended the tax law changes to the House committee shortly after President Kennedy had sent to Congress a special message asking again for congressional approval of his plan that would put limited health care of the aged under Social Security.

The American Medical Association reiterated its determined opposition to such legislation.

CHANGE WOULD EXTEND HEALTH COVERAGE

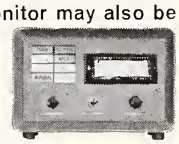
The Administration's new health care plan generally was similar to the King-Anderson bill which the Senate rejected last year. The major change would extend the health coverage to the 2.5 million older persons not covered by Social Security.

A variable hospitalization benefit program would be available to

Continued

NOW: A SANBORN TOTAL CARDIAC MONITORING SYSTEM

Here is the first cardiac monitoring system, with alarms and pacemaker, to provide an *integral electrocardiograph* — that can be set for automatic ECG recordings at either selected intervals, at the onset of any of four distress conditions, or *while the patient is being paced.* Characteristic Sanborn operating advantages are reflected throughout the design of the new Model 780 Viso-Monitor — in the *amount* of useful information presented and the *completeness* of controls and operating modes to meet individual patient needs. ■ The four basic functions of the Viso-Monitor are provided by these built-in facilities: *direct-writing electrocardiograph* of proven design, with added marker stylus to record digital pulse and to distinguish between "programmed" ECG's and "distress" ECG's; front panel *heart rate meter* with adjustable upper and lower limits; *visual alarms* by indicator lights for tachycardia, bradycardia, arrest, no pulse, QRS complex — plus instrument operating conditions (power, pacing, inoperate); and a *pacemaker* for internal or external pacing, operated manually or set for automatic pacing at arrest, with controls to preset pace current and rate. ■ For simultaneous *visual and audible alarm,* the 780-800 Remote Indicator displays heart rate and the 8 events as on bedside Viso-Monitor, plus a "beep" at each QRS complex and steady tone if distress occurs. Indicator lights remain on until reset at main unit. The Viso-Monitor may also be connected to the hospital call system, for an additional means of display and warning. ■ Model 780 Viso-Monitor $1850, Model 780-800 Remote Indicator unit $250, F.O.B. Waltham, Mass., continental U.S.A.



Compact bedside unit signals 8 events, provides ECG's, pacing



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all aged Social Security beneficiaries with costs paid from funds provided by an increase in Social Security taxes. Coverage for those not participating in Social Security programs would be paid from general tax revenues.

Beneficiaries would have the option of selecting from three coverage plans--45 days of hospitalization with no deductible; 90 days with a maximum $90 deductible; or 180 days with the insured paying a deductible equal to 21/2 days of average hospital costs.

Home nursing facilities, out-patient diagnostic services and up to 240 home health-care visits a year by community visiting nurses and physical therapists also would be provided.

Administration officials estimated the cost would be $7 billion for the first five years. Insurance officials predicted the cost would be substantially higher.

Under the proposal, Social Security taxes for both employers and employees, would be increased one-quarter of one percent. The Social Security tax for the self-employed would be hiked two-fifths of one percent.

President Kennedy also requested that the annual earnings base from which Social Security taxes are collected be raised to $5,200 from the present $4,800. The plan would start Jan. 1, 1965, and require an extra $27.50 contribution yearly from both the employee and employer where the employee makes $5,200 or more. Maximum added cost to the self-employed would be $42.40 a year.

George M. Fister, M.D., President of the American Medical Association, said the Administration's new plan "proposes a government-controlled program which would force increased taxes on wage earners and employers to buy limited hospitalization, nursing home and nursing care for millions of people over 65 who are financially able to take care of themselves."

"The use of tax funds to provide benefits to an entire population group regardless of need, the wealthy and well-to-do included, is just as unwise and economically unsound today as it was last year and the year before that," Dr. Fister said.

"The American Medical Association believes in helping those who need help, using tax funds where they may be required. We believe citizens of whatever age who are able to take care of themselves should not become a burden on the taxpayers. We believe the vast majority of Americans share our view."

AMA ENDORSES KENNEDY MENTAL HEALTH PROGRAM

The American Medical Association endorsed the Kennedy Administration's mental health and mental retardation program.

Testifying before the Senate Committee on Labor and Public Welfare, Dr. Leo. H. Bartemeier, former chairman of the AMA's Council on Mental

Health and medical director of Seton Psychiatric Institute, Baltimore, said:

"We believe these measures should be implemented in such a way as to guarantee every American the very best in medical care and treatment, and we stand ready to help achieve this standard. There is little doubt that these bills are of the utmost importance in our common goal of improving the nation's mental health profile."

The AMA particularly supported the basic approach to the Administration bills, namely that the mental health program should concentrate on development of community facilities for care of patients at a local level.

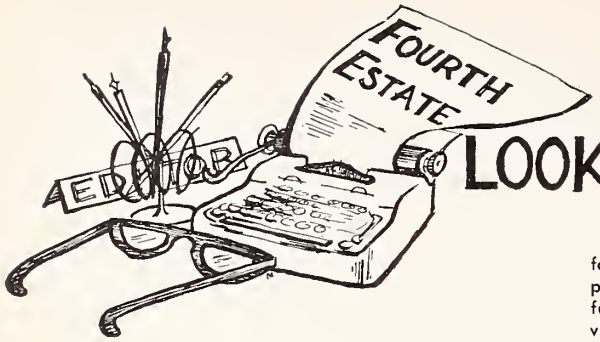
"The American Medical Association heartily approved of the concern shown by the President of the United States and by this committee over what we consider to be America's most pressing and complex health problem," Dr. Charles L. Hudson, Cleveland, Ohio, a member of the AMA Board of Trustees, said.

All witnesses, representing other health organizations and state governments, also supported the legislation. Some, including the AMA, recommended minor changes. ◄

From *The Journal* Fifty Years Ago

. . . It has been less than ten years that the principles of bronchoscopy have been applied to the examination and removal of foreign bodies from the esophagus, and it has been scarcely five years since the same principles have been adopted in making a direct inspection of the stomach and removal of foreign bodies therefrom. It may be said also that it has been within the last five or six years that bronchoscopy, esophagoscopy and gastroscopy have been considered and adopted by any considerable number of physicians, though as Jackson, the father of bronchoscopy and esophagoscopy in this country, and the originator of gastroscopy, has said, "The time has come when not only the profession, but also the public demands that every laryngologist shall be expert at the removal of foreign bodies from the trachea, bronchi, esophagus and stomach. The day has come when the treatment of diseased organs, especially chronically diseased organs, without looking at them, is regarded as a groping in the dark that is permissible only in organs that cannot be safely examined."

The examination of the air and food passages by the direct method requires an instrumentarium and a technic that almost discourages the beginner, and yet with the rapid advance of the study and application of the procedure it is confidently thought that simplification will come with improved apparatus and advanced methods of operating. The time will not come, however, when the procedure will cease to tax the ingenuity, dexterity and judgment of the operator, no matter how skilled, and the endurance and apprehension of the patient. . . . Albert E. Bulson, Jr., M.D., "Bronchoscopy and Esophagoscopy," *JISMA*, April, 1913.



LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentotion fo opinions which oppeor on the editorial pages of the public press, and which ore of interest to the medicol profession. Its function is to review comments which may be fovoroble or unfavorable to medicine. Members are invited to submit editorial clippings for this column.

First The Aged, Then All

In the President's message to Congress on health care and other Federal aids to the aged, there is this sentence: "It is the logical extension of a principle established 28 years ago in the Social Security system and confirmed many times since by both Congress and the American voters."

The principle is, of course, that the very good habit of saving to provide for the needs of old age be gradually transferred from the voluntary realm of private endeavor to the compulsory area of payroll taxation.

Both the benefits and the taxes of ordinary Social Security have gone up and up over the years. The aged health insurance plan, defeated last year in Congress, is an attempt at further extension. Even this attempt is growing from one congressional try to the next. The cost of this year's proposals, over a five-year term, is estimated at nearly $10,000,000,000. Besides hospital and nursing home care for the aged, other aid for this group involves the fields of housing, employment opportunity and added economic security through tax credits.

It should be obvious that if the misnamed "medicare" program of hospital aid for the aged were approved, it would not be long before still more extensions of Social Security, invading still additional fields and probably additional groups, would be proposed. To borrow the President's own word, the next "logical" extension would be socialized medicine for the aged—and then for everyone. Nor would the subsidization of other needs from housing to recreation, and for not just the aged but other special groups as well, be slow in following.

The insidious part of the argument is that some hardship can be proved and therefore the element of human need is present. But the element of a free society is ominously in the background.

Congress has once rejected this health care plan and we hope it is prepared to repeat the rebuff.—*Indianapolis Star,* March 1, 1963.

Is HEW Scuttling Kerr-Mills Act?

For two years, now, the Kerr-Mills Act has been providing funds for medical care for the aged under a state-Federal program. Now, it seems, the Social Security Administration is quietly putting the brakes on the program as a means of promoting the Administration's Medicare program.

In a 15-page report on its activities, the Health, Education and Welfare Department plugged Medicare but generally ignored the fact that the number of aged who received benefits under the Kerr-Mills had risen from 46,000 in 1961 to 101,000 in 1962.

The official line is still that there is no help for the aged indigent when they become ill, and that the only answer is to provide certain kinds of medical payments under the Social Security System.

John Troan of the Scripps-Howard Newspapers reported that the Department of Health, Education and Welfare was "too busy" to supply personnel to help the American Hospital Association organize action to improve Kerr-Mills benefits, and to secure enactment of laws that would extend the program to 25 states and the District of Columbia not now covered.

The question arises: is HEW really concerned about the medical needs of the aged when it neglects to extend what help is now available for the political purpose of promoting a substitute program favored by the Administration? Or is HEW callously dragging its feet, ignoring a law that Congress enacted giving HEW responsibility for helping the elderly with their medical needs?

Medicare is a strange proposal, which would tax some citizens to pay the medical bills for some specific other citizens, who have made no contribution to Social Security for this purpose. It would pay some medical expenses, but not others, and would confer charity on those who need it and those who do not need it alike.

Kerr-Mills can be challenged on the grounds that medical care for the indigent always has been available, and Federal programs are not needed. But at least it contains none of the rank discrimination against some taxpayers, and does not pay bills for those able to pay their own.

Kerr-Mills is the law. HEW is obligated to administer it, not sabotage it.—*Bloomington Herald-Telephone,* January 24, 1963.

Expansion of Hospitals in Public Interest

The discussion of expansion of Evansville's hospitals was predictable, though the exact form was not.

The form is an argument over possible city use of redevelopment powers to intervene, in effect, in bargaining between hospitals and nearby property owners. Despite technicalities about other possible bidders, it is apparent that under the latest proposals the city would be doing exactly that.

The city would acquire property under procedures that allow courts to set fair market values. These might be less than the owners' asking prices. With Federal aid, the city would clear the land and then sell it to the hospitals at a price lower than the total cost of acquisition and clearing.

The proposition is not as indefensible as it sounds. There is a continuing national shortage of hospital beds in America. In his State of the Union message, President Kennedy referred to "widespread shortages of nursing homes and modern urban hospital facilities." This shortage was bound to lead for pressure to expand local hospitals' capacity.

This is a matter of importance to the whole community. It involves adequate medical care, in terms of buildings suited to modern practice. Especially, it involves facilities for handling problems of the elderly, and for training nurses to meet a growing demand for hospital services.

It also involves Evansville's standing as a Tri-State center for professional services. Good hospitals tend to attract good doctors. They, in turn, serve patients from areas a considerable distance from Evansville. The city that provides a region's professional services is likely to form other economic ties.

Moreover, Evansville's hospitals can argue that if they do not go forward, they will go backward. Throughout the country, hospitals in urban centers are struggling to modernize their plants. The effort was delayed by wartime construction halts and by postwar priorities on projects for rural areas that were woefully short of all kinds of hospital facilities. Obsolescent parts of urban hospitals continue to have some use, but they must be supplemented by more modern additions.

These factors will undoubtedly be cited in an effort to prove that it is sound public policy for the city to aid the hospitals, especially if it can be done with Federal urban renewal funds. The urban renewal assistance undoubtedly would be preferable to a possible alternative—eventual establishment of a full-fledged city or county general hospital.

The goals of urban renewal include, among others, converting poorly used land to better uses, providing facilities to make the city attractive to persons of all income levels, and making it favorable for commercial, industrial, and cultural pursuits.

Hospital expansion plans are clearly in the public interest and should be translated into action.

The action will be speeded and the path for future projects cleared if every possible effort is made to meet objections, and to do

justice to affected property owners.—*Evansville Courier-Journal,* January 27, 1963.

Not Now, Later

With a perfectly straight face, Edward R. Murrow of the United States Information Agency has said that foreign public opinion polls will be made available—a year after they have been completed.

There is one exception. Some of the polls are marked "Confidential." They will be made available two years after completion "unless at that time the interests of national security require them to remain classified."

This is the New Frontier answer to those who want to know what the government has been learning of what foreigners think of the United States, its policies and its President at this moment. A year from now, the public that paid the taxes for the poll may find out—unless it is marked "Confidential."

Of course, there seems to be good reason for this reticence. We refer not to the obvious question of the American governmental image in foreign eyes, but rather to one of the first polls released by USIA. Apparently taken something more than a year ago, this sampling of foreign opinion found that most Europeans think American women "lazy, over-sexed, domineering and frivolous."

Among other things, Americans have paid for polls on what the people in Lima, Peru, thought of President Kennedy in January, 1961, and what the people in Saigon thought of Premier Khrushchev on the same date. Foreigners have been asked about Fidel Castro, radio listening in Taiwan and the U. S. library in Battambang. These, and other breathless subjects, were the object of 34 studies sampling opinion in those far-away places that mean so much to the USIA.

What the European opinion of American women has to do with national policy has not been fully explained. However, President Kennedy said these polls should not be made public because it was not in the best interests of the country. In addition, he went on to point out that it was more important to be right than well liked. This last is true, but the average American woman is not likely to agree if she is supposed to accept that poll as right.

Yet, these polls are being paid for by the American public. If they continue, the polls should be available to the people of the United States, as President Kennedy so rightly demanded when he was running for office. It is distressing to see the New Frontier slink behind a security stamp just to keep us from knowing what books circulate best in Battambang.

Better still, why not stop this foolishness?—*Indianapolis Star,* March 5, 1963. ◄

The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 56 — April 1963 — Number 4

The Epidemiologic Approach to Leukemia

II. Geographic Distribution in Indiana 1951-1960*

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ALTHOUGH ETIOLOGIC AGENTS, both living (viruses) and non-living, have been demonstrated for a variety of neoplasms in experimental animals, specific etiologic agents have been identified for relatively few types of neoplasms in humans. Evidence that exposures to certain environmental physical and chemical carcinogens consistently result in the production of specific neoplasms has provided the only documented examples of definite cause-effect relations in the field of human oncology.

Because detailed long-term studies might be expected to reveal oncogenic activity of additional environmental agents, and because the effects of these agents require evaluation in terms of innate susceptibility or resistance of an individual to neoplasms, the American Cancer Society is conducting a long-term Cancer Prevention Study[1] involving more than 1,000,000 individuals in the United States. Volunteers are requested to furnish detailed information concerning family histories, personal habits, etc., over a period of several years; compilation and analysis of these data will be correlated with the ultimate development of neoplasms.

It is not surprising that the same or similar carcinogenic agents produce neoplasms in both experimental animals and human subjects. Because viruses are known to cause neoplasms in a wide variety of species of animals, including amphibians, birds, rodents and probably cattle, it would be a biologic anomaly if viruses are not causative in at least some neoplasms of humans. To date, none of the many attempts to extract oncogenic viruses from human neoplasms has resulted in convincing evidence that a neoplasm arising in an inoculated experimental animal was caused by an agent derived from a human neoplasm. Interpretations of those few claims that have been made are difficult because most investigations have utilized mice which are known to serve as reservoirs for oncogenic murine viruses, *i.e.*, "polyoma" and others.

Causes Sarcoma in Hamsters

A fresh approach, that is, the testing of *known human viruses* for oncogenic potentialities, has yielded more promising results. In a series of brilliant experiments performed by Trentin,[2] human adenovirus type 12 is reported to have caused sarcomas in

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* This study was supported in part by a grant from the United Fund of Madison County, Indiana.

hamsters. Whether this adenovirus or other viruses are actually oncogenic in humans remains to be established. It is probable that oncogenic properties will be demonstrated for other human viruses.

The only human neoplasm to date (with the exceptions of warts and molluscum contagiosum) for which there is convincing presumptive evidence that viral agents are involved is a peculiar malignant lymphoma found in African children, reported by Burkitt.[3, 4] The evidence, which is based entirely on epidemiologic observations, reveals that occurrence is limited to a specific region of transequatorial Africa, an area characterized by sharp limits of elevation and minimum yearly temperatures of 60° F, a situation that suggests distribution by an insect vector, possibly a mosquito.

Geographical Leukemia Studies

That the occurrence is related to geography rather than to genetic or racial characteristics is indicated by the fact that African children afflicted with the neoplasm represent several tribal origins, that the neoplasm has been observed in Indian children living in the endemic region of Africa but never in India, and that, with a single exception, the neoplasm has never been observed in other areas of the African continent or in other parts of the world. The limited geographic occurrence was established by circulation of questionnaires, drawing attention to the unusual and dramatic involvement of jaws of afflicted children, a factor that served as a useful criterion as to whether the neoplasm had been observed. If this lymphoma is ultimately proved to be caused by an infectious agent transmitted by an insect vector, a tremendous contribution will have been made to the field of human oncology. Certainly, evidence is convincing enough to inspire large-scale epidemiologic studies throughout the world.

Statistical data concerning incidence of leukemia in individuals of all age groups in the United States[5] and in the world[6] indicate that geographic distribution is not uniform, although definite patterns of occurrence have not been established. The unusually low incidence of chronic lymphatic leukemia in Japan and a difference in incidence in various regions of the United States suggests possible associations of environmental factors, although inherent racial (genetic) factors may be involved.

Acute childhood leukemias are well-suited for epidemiologic studies because of the relatively short duration of the disease, spectacular clinical symptoms and signs which result in early and accurate diagnoses, and the relative accuracy (compared to most neoplasms) with which time of onset can be established. A 13-year study performed in the Buffalo, New York, area[7] revealed a tendency for geographic "clumping" of cases of acute leukemia in children. Clark Heath[8] of the United States Public Health Service has investigated an "outbreak" of acute childhood leukemia in Niles, Illinois, a city of 20,000 people, in which eight cases of acute leukemia occurred within a period of three years, an incidence more than ten times the United States average. Seven of the afflicted children or their siblings attended the same parochial school. Investigations revealed no "unusual" contacts among the eight families involved; most significant was the fact that no new cases had occurred in this community subsequent to onset of the disease in the eighth child.

Preliminary results of studies of geographic distribution of leukemias and lymphomas in the state of Indiana are for the ten-year period 1951-1960 as outlined in a previous publication[9] are being reported in an attempt to arouse interest in this project among the practicing physicians throughout the state who are most likely to encounter instances of close geographic associations between individuals with these diseases.

Methods

Death certificates of persons of all ages who are registered as having died of leukemia and related diseases (including lymphomas of all types and myelomas) in the ten-year period 1951-1960, have been extracted from the files of the Indiana State Board of Health. Information available from these certificates includes: name, date of birth, date of death, place of death, diag-

nosis, attending physician, names of parents or relatives, autopsy results (if performed) and duration of illness.

Index cards containing these data were sorted according to county of residence, city, town, or rural area, and by age and date of death. Addresses of children with acute leukemias and other lymphomas were indicated on maps of cities, towns and rural areas. If any area showed significant "clustering" of cases (two or more in a small geographic area within a short period of time) parents and relatives of these individuals were interviewed to obtain family histories and details of possible contacts between affected individuals. To date, six "suspicious" areas have been discovered; four of these have been studied thoroughly by interviews with surviving family members.

The author has personally studied all death certificates included in the study and has conducted all the interviews. Attempts were made to assess accuracy of diagnoses. In most cases, diagnoses were described by cell types, suggesting that patients had received thorough diagnostic studies and/or autopsies. The majority had died in hospitals in which there are laboratory facilities under the direction of a clinical pathologist. Many had been attended by clinical hematologists, particularly those of the Indiana University Medical Center. Others in areas on the borders of the state had received diagnoses and therapy in medical centers in Chicago, Cincinnati, Louisville, or St. Louis.

Although there are few areas of the state that are not within convenient access to adequate diagnostic facilities, it is likely that the total number of cases included in this study is erroneously low, because death may occur from complications of these diseases without the nature of the underlying disease being apparent. Because of the inter-relationships of leukemias and other lymphomas, considered by many to be variations of the same disease, and because there is variation in interpretation of cell types involved in some cases, no attempts were made to categorize by cell types.

Many difficulties other than possible errors or variation in diagnoses are encountered in attempts to relate time-space factors in this group of diseases. Even in acute leukemias, *the exact time of onset* is difficult to document; in chronic forms it is almost impossible. Geographic studies are difficult because of the tendency of families to move frequently. However, in most cases of acute lymphomas in children, it was possible to establish the place of residence at the time of onset of symptoms.

Results

There were 5,162 deaths from leukemias and related diseases in the state of Indiana for the ten-year period. Of these, 591 were children 16 years of age or younger. The overall incidence (all age groups) for the state was 1.2 deaths per 1,000 population (because diseases in this category are invariably fatal, death rate is approximately equal to incidence). Calculations of rates were based on averages of population for 1950 and 1960 (3,934,224, 1950 census; 4,662,498, 1960 census).

Data cards sorted according to counties of residence revealed that in 59 of 92 counties, incidence ranged from 1.0 to 1.4 per 1,000 population; 20 counties were recorded as "high" incidences, with ranges of 1.5 to 2.0; 13 counties (including Marion and Lake counties) had ranges of 0.9 or fewer per 1,000 population.

Cases of acute leukemia of childhood were given special attention. When total deaths of children under 16 years of age were tabulated for the ten-year period and incidences per 1,000 children were calculated by county of residence, no meaningful differences were found. Death rates, based on initial impressions, tended to be relatively constant from year to year. Maps of larger cities revealed a remarkably uniform scattering of cases with densest markings in areas of densest population.

An exception was the city of Richmond, Indiana (population 44,149, 1960 census), in which seven of eight total cases of acute childhood leukemia reported for the ten-year period occurred in 1958, 1959, and 1960. All eight families lived south of highway U. S. 40, which divides the city into approximately equal parts; three families

had lived within three city blocks of each other at the time of deaths of the children. Detailed studies of this community are in progress (interviews with parents to establish exact geographic locations of residences at time of onset and possible contacts between affected individuals).

Four additional areas of the state revealed suspicious "clustering" of cases of acute leukemia of childhood. Two of these were located in counties of "highest" overall incidence. These areas, all of which are located in small towns or rural areas, have been studied by detailed interviews of parents. Details of preliminary interviews are described briefly:

1. *Cass county, Jackson township* (population 2,198, 1960 census), near town of Lincoln (population less than 1,000), (ages and years are those at time of death):
 Case A: boy, age seven, lymphosarcoma, 1956
 Case B: boy, age two, acute lymphatic leukemia, 1956
 Case C: girl, age 20, chronic leukemia, 1956 (included because of close geographic proximity to other two cases)

No other cases of acute leukemias or lymphomas of children were recorded in the community in the ten-year period. Three adults in the community died of leukemias and related diseases in 1953 and 1958. One of these had lived less than one mile from the residences of children A and B. Both children (Cases A and B) had received diagnostic studies and therapy at the Indiana University Medical Center. The two families lived within two miles of each other, but there had been no close contact except that older children of both families had attended school with the 20-year-old girl (Case C). Case A had received x-ray "therapy" for an enlarged thymus during the first year of life.

The small number of cases does not permit valid statistical analyses. Whether the close spatial-temporal relationship is more than coincidental cannot be stated.

2. *Cass county:* area involves a portion of the city of Logansport (population 21,106, 1960 census) and an area of Noble township adjacent to Logansport (population 1,534):
 Case A: boy, age nine, acute leukemia, 1959
 Case B: boy, age seven, acute leukemia, 1959

Case A had received diagnostic studies and therapy at the Indiana University Medical Center; Case B had been under the care of an Indianapolis pediatrician and an Indianapolis hematologist. Both children lived in a rural area north of Logansport, within ½ mile of each other, when symptoms appeared. The two boys attended the same school but otherwise had had no direct contact. The mother of a classmate of Case A, who had lived within ¼ mile, died of leukemia in 1961. An 18-year-old girl, who lived within a mile of Case A, died of leukemia in 1961. There had been no other cases of leukemia in children recorded in this rural area prior to 1959 (back to 1951). There had been two cases of leukemia in children in the city of Logansport, in 1953 and 1956. There were 30 cases of adult leukemia and related diseases in the city of Logansport and surrounding area in the ten-year period.

3. *Wabash county, Noble township* (population 15,654, 1960 census), which includes the city of Wabash (population 12,621). The study involves seven children (including an 18-year-old boy), who died of acute lymphomas, three of whom lived in urban areas, four in rural areas. Two of the latter lived in Noble township south of the city of Wabash; the third lived in Waltz township near the boundary of adjacent Noble township. Four of the seven families have participated in interviews; the others will be interviewed within the next few weeks.

Urban addresses: Case A: one-year-old girl, acute lymphatic leukemia, 1959.
Case B: boy, age three and one-half, acute lymphatic leukemia, 1959
Case C: girl, age seven, acute monocytic leukemia, 1960

Rural addresses: Case D: girl, age four, acute lymphatic leukemia, 1959
Case E: boy, age five, lymphosarcoma, 1958

Case F: girl, age eight, acute monocytic leukemia, 1958

Case G: boy, age 18, acute monocytic leukemia, 1959

There were no other cases of acute lymphomas of childhood reported in the ten-year period; 24 adults died of leukemias and related diseases in the ten-year period.

Interviews to date have included Cases B, E, F, and G. There was no close contact between the families of these children, except that the fathers in Cases B and F were in the same Sunday-school class. Two families had older children in the same schools. Two of the urban families lived within two city blocks of each other at the time of deaths of the children but had not known each other. Exact distances between residences of all families will be determined.

4. *Knox county, Steen township* (population 1,264, 1960 census), includes the town of Wheatland (population less than 1,000):

 Case A: girl, age two years, acute leukemia, 1958 (August)

 Case B: boy, age one year, acute leukemia, 1959 (August)

 Case C: boy, age seven years, chronic leukemia, 1958 (January)

There had been no other cases of leukemia in any age group reported for the ten-year period for this area. The children of Cases A and B had been under the care of a pediatrician in Vincennes, Indiana (15 miles from Wheatland); the child of Case C had received diagnosis and therapy in Children's Hospital, St. Louis, Missouri.

The families of child A and child B lived within a few city blocks of each other at the time of onset of symptoms of the diseases in both cases. The family of child C lived on a farm several miles away. Families B and C had older boys approximately the same age who had probably attended the same school; the maternal grandmother of child C lived just a city block from the house in which child A lived. The three families attended the same church. Otherwise, there had been no contact between Case C and the other two families. The mothers of Cases A and B had been friends; the mother of child B, while pregnant, had cared for Child A during the final days of her illness. Child A died in Good Samaritan Hospital in Vincennes the day after child B was born in the same hospital. The mother of child B had been in labor several days before delivery and had received several pelvic x-rays.

Child A had contracted measles, chickenpox and "flu" from her six-year-old brother six months prior to her death. The brother recovered from these illnesses without incident; the younger child never fully recovered; within a few weeks, the signs of leukemia became manifest.

The mother of child C had had idiopathic thrombocytopenic purpura, which responded to splenectomy, two years prior to onset of symptoms of leukemia in her son. A neighbor child was said to have had idiopathic thrombocytopenic purpura several months prior to the onset of the disease in this mother. The significance of these various factors is not obvious.

5. *Marion county:* Because Marion county was among the counties of lowest incidence (all ages), additional studies were performed:

There were 776 deaths from leukemias and related diseases in the ten-year period. Incidence per 1,000 population was 0.8 compared with 1.2, the average for the state (population of Marion county 551,777, 1950 census; 697,567, 1960 census). Eighty-nine (11%) of these deaths occurred in children 16 years of age and under. Deaths in adults showed a relatively constant increase from year to year. Although the total population increased by only 1/7, the number of deaths from these diseases was approximately double in 1959 compared with 1951. In 1960, the number decreased slightly. The incidence was more erratic in children; there was wide variation from year to year ranging from three cases in 1952 to 12 in 1955 and 1958.

Of 89 cases of childhood lymphomas, four deaths occurred in a relatively small area (within four city blocks of each other). These deaths occurred in 1953, 1957, 1958 and 1959. Two of these children were approximately the same age; whether they had attended the same school or had other

contacts has not been determined. The other children were of pre-school age. No other "suspicious" sequences were noted in Marion county.

Because in Marion county the overall incidence of these diseases was lower than the average of the state, evaluations were made to try to discover reasons for this difference. Twelve percent of all lymphomas and allied diseases occurred in Negroes; Negroes compose 12% (1950) to 15% (1960) of the population of Marion county. Eight and five-tenths percent of all cases recorded were myelomas; myelomas accounted for 19% of deaths from malignant diseases of blood-forming organs in Negroes, 7% in non-Negroes. If myelomas are included in the final figures, the incidence of these diseases is approximately the same for Negroes and non-Negroes. If myelomas are excluded, the incidence in Negroes is lower than in non-Negroes. Of 89 cases of leukemias and lymphomas in children 16 years or under, only five (5.5%) occurred in Negroes.

Statistical evaluations are being made for incidences in Marion county for small population groups based on analyses of census tracts.

Discussion

Although statistical evaluations of data derived from this study are incomplete, there is evidence of a non-uniform distribution of leukemias and related diseases in the state of Indiana. Environmental factors known to be associated with neoplasms of humans (abnormal levels of radioactivity in water, milk or soil or exposure to chemical carcinogens) are being evaluated. Because present evidence indicates a strong possibility that viruses may be implicated in some acute leukemias of children, attempts will be made to establish whether situations known to be associated with transmission of infectious agents generally existed in those communities in which an unusual number of cases occurred during a short period of time. Patterns of distribution of acute leukemias will be compared with those of infectious diseases reported to the Indiana State Board of Health during the same periods of time. Yearly rainfall, soil types and evidence of stagnation or contamination of water in areas of "high incidence" will be compared with those of "low incidence." The reports of Burkitt[3, 4] emphasize the need for careful evaluation of climatic factors.

It would be premature to draw conclusions from the limited data reported in this study. However, the uneven distribution and tendency for "clustering" of some cases of acute leukemias of children indicated in these studies and in those performed in Niles, Illinois and Buffalo, New York, are not inconsistent with an infectious etiology. If adenoviruses are oncogenic in humans, it is tempting to explain "outbreaks" of acute childhood leukemia in a community in this manner: An "orphan" virus (adenovirus or other) introduced into a "non-immune" community might be expected to infect or infest a large number of individuals, particularly children, resulting in only mild symptoms referable to the upper respiratory system (certain adenoviruses are known to cause epidemics of conjunctivitis or upper respiratory infections in military recruits[10] or in other situations in which groups of susceptible individuals are exposed to a "new" agent for the first time; further, adenoviruses are known to reside in tonsils and other lymphoid tissues for long periods of time in asymptomatic individuals). The majority of infected individuals in our theoretical situation would probably suffer no permanent sequelae from contact with this agent. Some individuals might harbor the agent without demonstrable pathologic changes or clinical evidence of infection for varying periods of time. Some "susceptible" individuals, however, might react to infection with this potentially oncogenic agent by development of a neoplasm.

Variation in reactions of individual hosts is characteristic of many infectious agents. (An example is poliomyelitis, which is proved by serologic evidence to have infected a large proportion of the population without giving clinical evidence of its presence. A relatively small percentage of individuals infected with this *enterovirus* develop clinical evidence of involvement of the central nervous system. Damage to the

anterior horn cells with resulting paralyses is actually an *unusual manifestation* of infection by polioviruses.) If adenoviruses are involved in production of leukemia or other neoplasms in humans, development of neoplasms must be considered to be an *unusual reaction* of body cells to infection by a relatively innocuous agent. Theories could be advanced to explain the roles of various intrinsic or extrinsic factors in "triggering" the unlimited cellular hyperplasia characteristic of neoplasia.

The formidable task of establishing a relation of adenoviruses to neoplasms of humans will require careful epidemiologic studies combined with testing of sera of large numbers of individuals with neoplasms, their unaffected relatives, and those in their communities of residence for evidence of infection with these agents. Because the time of onset of most neoplasms is difficult to establish, acute leukemias of children are most suited for combined epidemiologic-serologic studies. Dr. Trentin[11] has requested sera from children with acute neoplasms for testing for evidence of simultaneous or prior evidence of infection with type 12 or other adenoviruses. Establishing a relation of any infectious agent to a pathologic lesion is difficult but has been accomplished for an imposing number of infectious diseases.

Summary

Results of preliminary investigations of leukemias and related diseases in the state of Indiana for a ten-year period indicate that at least some cases of acute childhood leukemias and lymphomas occur in an uneven geographic distribution. There is need for further evaluation of these data, especially in view of several recent reports of investigators who have (1) demonstrated that human adenoviruses are oncogenic in hamsters, and (2) reported convincing evidence that the occurrence of a type of malignant lymphoma is dependent upon certain specific environmental factors that strongly suggest the distribution of an infectious disease transmitted by an insect vector. It is further hoped that practicing physicians will cooperate in the study by reporting instances of two or more cases of acute leukemias in children occurring in a community within a short period of time.

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Folic Acid Deficiency In Hereditary Spherocytosis

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THE COURSE of the patient with hereditary spherocytosis may be complicated by a crisis characterized by fever, nausea, vomiting, abdominal pain, pallor, weakness and the development of a more severe anemia. The intensification of the anemia in a crisis of hereditary spherocytosis may be produced by one of several mechanisms. A further acceleration of the rate of red cell destruction was once considered the most common cause of an exacerbation of anemia in this condition, but recent studies indicate that increased hemolysis alone is usually not the predominant mechanism.[1]

A decreased rate of erythropoiesis associated with hypoplasia of the bone marrow has been described frequently in the crisis of hereditary spherocytosis and, although the factors which produce the so-called "aplastic crisis" are not known with certainty, infection seems to play a prominent role.[2] In addition to increased hemolysis and aplasia of the marrow, a crisis may be due to megaloblastic transformation of the bone marrow as a result of folic acid deficiency.[3]

It is difficult to differentiate clinically between increased hemolysis, aplasia, or megaloblastic transformation of the bone marrow as the cause of a crisis in hereditary spherocytosis, since the clinical manifestations are similar. Hematologic studies are diagnostic, however, since a reticulopenia occurs with aplasia and megaloblastic transformation of the bone marrow, and bone marrow examination reveals normoblastic hyperplasia when increased hemolysis is the responsible mechanism, hypoplasia in the so-called "aplastic crisis" and megaloblastosis when folic acid deficiency is present.

We have had the opportunity to study a child with hereditary spherocytosis in whom the presenting manifestations were those of a crisis associated with megaloblastic transformation of the bone marrow. This is the first example known to us of this complication occurring in a child. In addition, there was no obvious cause for the folic acid deficiency other than the presence of a chronic hemolytic anemia. A description of this case and a brief review of the literature constitutes the present report.

Case Report

The patient, an 8-year-old white male was admitted to the Louisville Children's Hospital complaining of weakness, nausea, vomiting and abdominal discomfort of approximately one week's duration.

The history of the child's illness was obtained from the parents. The child had been well and apparently in good health until one week prior to admission when they noted the onset of fever and extreme weakness. His appetite became poor, he complained of intermittent nausea and on several occasions, vomited. The fever persisted and was recorded as high as 104°. Four days prior to admission to the Louisville Children's Hospital, the child was admitted to another hospital where laboratory studies revealed the presence of severe anemia, but no cause for the fever was apparent.

Past History. The past history was significant in the following: In December, 1958, persistent cough and fever were noted

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following pertussis. The child was hospitalized at the Louisville Children's Hospital and a bronchoscopy performed which revealed atelectasis of the right upper lobe which cleared rapidly following postural drainage and antibiotic therapy. A bronchogram was performed which showed a normal tracheal tree. A moderate anemia (hemoglobin 10.5 grams) was present; the red cells were described as being microcytic and an occasional spherocyte was noted. The anemia was attributed to infection.

The family history revealed no evidence of anemia in the patient's siblings or parents.

Physical examination revealed an acutely ill, well developed, well nourished white male. The temperature was 102.5°, pulse 100, respiration 20, blood pressure 110/60. Growth and development were normal for his stated age of eight years. The significant features on physical examination were as follows: There was a striking pallor of the skin and mucous membranes. A slight icteric tinge of the sclerae was noted. The cervical lymph nodes were palpably enlarged bilaterally. A grade II blowing systolic murmur was heard over the entire precordium which was transmitted to the neck. The spleen was palpable three fingerbreadths below the left costal margin. The liver was not felt. The remainder of the physical examination was not remarkable.

Hematologic studies, at the time of admission, revealed hemoglobin 4.4 grams %, hematocrit 13%, reticulocytes 0.2%, platelets 127,500 per cu.mm, white blood count 8,200 per cu.mm. A supravital differential revealed PMN 62%, lymphocytes 30, monocytes eight. The red cells in the peripheral blood were microspherocytic.

A bone marrow specimen was of normal cellularity and revealed megaloblastic transformation of the erythroid elements (Figure 1). The myeloid elements appeared normal, but occasional giant myelocytes were noted. The urinalysis was not remarkable and the remainder of the routine laboratory studies revealed no significant abnormalities. The serum vitamin B_{12} level was 440 micromicrograms per ml. (Normal 150-600 micromicrograms/ml.)

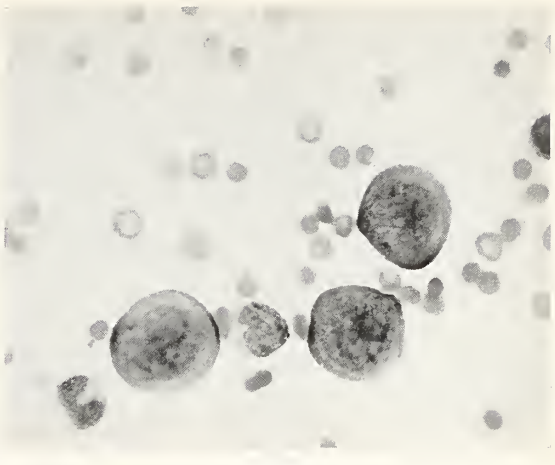


FIGURE 1.

BONE MARROW showing megaloblasts prior to treatment. Note the spherocytosis of the red cells.

Hospital Course. The child appeared critically ill on admission and was given 250cc of packed red cells after the initial hematologic studies were performed. The presence of microspherocytosis of the red cells and megaloblastosis of the bone marrow suggested the diagnosis of hereditary spherocytosis complicated by folic acid deficiency. The original diagnostic impression seemed to be substantiated by a perusal of the record of his previous hospital admission. Therapy with 10 milligrams of folic acid per day orally was begun on the first day. A prompt clinical and hematologic response occurred and on the fourth day, the reticulocytes were 9%.

The child was discharged on the seventh day and the hematologic studies on the day of discharge revealed hemoglobin 9 grams %, hematocrit 30% and reticulocytes 15.2% (Figure 2). A repeat bone marrow examination showed normoblastic hyperplasia.

On April 21, 1961 a splenectomy was performed at another hospital. Blood transfusion was not necessary before or during the surgical procedure, and his pre- and postoperative course was completely uneventful. The child was re-evaluated three weeks following the splenectomy at which time the hemoglobin was 13 grams %, hematocrit 42% and reticulocytes 3.4%. Morphologic examination of the peripheral

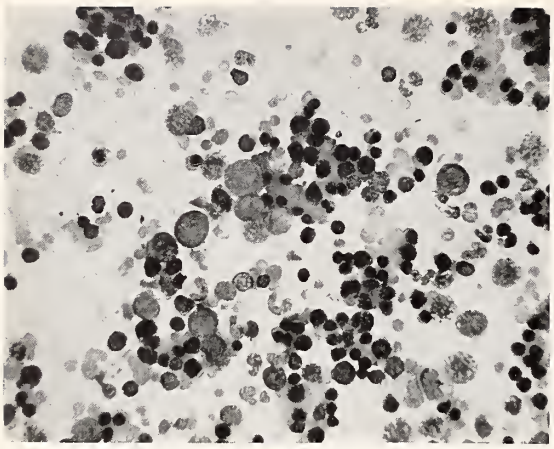


FIGURE II.
BONE MARROW after treatment with folic acid.

blood revealed the persistence of microspherocytic red cells.

Discussion

The presenting manifestations of fever, nausea, vomiting, abdominal pain, extreme weakness and severe anemia which occurred in the patient were characteristic of a crisis of hereditary spherocytosis. Reticulocytes were diminished in the peripheral blood; a hematologic finding that has been emphasized as indicative of either aplasia or megaloblastic change in the bone marrow when found in a patient with hemolytic anemia. The microspherocytosis of the erythrocytes associated with megaloblastosis of the bone marrow was consistent with the diagnosis of hereditary spherocytosis complicated by folic acid deficiency.

Megaloblastic transformation of the bone marrow due to a deficiency of vitamin B_{12} has not been described in patients with chronic hemolytic anemia and in our patient, the serum vitamin B_{12} level was within the normal range. Megaloblastosis of the bone marrow has also been described in other types of chronic hemolytic anemia including thalassemia, sickle cell anemia and acquired hemolytic anemia.[4] It is an uncommon complication of hereditary spherocytosis and in the majority of the previously reported cases, some other factor which increases the requirement of folic acid e.g. pregnancy has been present.[3]

The development of folic acid deficiency in chronic hemolytic anemia has been attributed to an enhanced requirement as a result of increased erythropoiesis, and dietary deficiency does not appear to be a significant factor. There was no evidence of dietary inadequacy in our patient and his appetite was described as being excellent prior to the onset of his illness.

The problem of dietary deficiency of folic acid is not a simple one, however, since the normal daily requirement of folic acid is not known with certainty. The amount of folic acid necessary to maintain erythropoiesis appears to be quite small. It has been shown that the megaloblastic anemia of folic acid deficiency will respond adequately to 400 micrograms of folic acid intramuscularly per day, and 25 micrograms of folic acid orally per day produces a complete remission of megaloblastic anemia of Sprue.[5,6] Although data concerning the folic acid content of foods is far from complete, the folic acid available in a well balanced diet is assumed to be greater than 1 milligram per day.

There are several studies which indicate that the accelerated erythropoietic activity associated with a hemolytic anemia increases the requirement for folic acid. Chanarin et al. have shown that the rate of plasma clearance of injected folic acid is accelerated in hemolytic anemia and the rapid plasma clearance has been considered indicative of tissue depletion of folic acid.[4] Urinary excretion of formimino glutamic acid (FIGLU) is increased following the oral administration of 15 grams of histidine in the presence of folic acid deficiency.

Pearce and Rath have described a patient with homozygous sickle cell disease who developed a more severe anemia associated with megaloblastic transformation of the bone marrow in whom folic acid deficiency was demonstrated by an increased urinary excretion of FIGLU.[7] The administration of folic acid resulted in a reticulocytosis and conversion of the bone marrow from megaloblastic to normoblastic hyperplasia. Although the hematologic findings are not described, evidence of folic acid deficiency was found in five additional patients with sickle cell anemia by the FIGLU assay method.

The available evidence, therefore, indicates that the accelerated erythropoiesis

associated with hemolysis increases the requirement of folic acid. Normal erythropoiesis results in the daily production of 20 to 25 ml. of red cells equivalent to 6 to 7 grams of hemoglobin. The maximum erythropoietic activity of the bone marrow is approximately six to eight times the normal rate of erythropoiesis. If 400 micrograms of folic acid per day represents the minimum amount necessary for erythropoiesis, and it may be much less, the amount of folic acid necessary for maximal erythropoiesis would be no more than 2 to 2.5 milligrams.

The relatively small amount of folic acid necessary for maximal erythropoiesis and the rarity of megaloblastic transformation of the bone marrow in hemolytic anemia suggests that other factors may play a role in the development of megaloblastosis. Perhaps, as has been suggested in the megaloblastic anemia of pregnancy, substances which interfere with the metabolism of folic acid occur in chronic hemolytic anemia.[8] It is apparent, however, that the megaloblastic transformation of the bone marrow associated with hemolytic anemia can be completely alleviated by medicinal folic acid. It may be worthwhile to supplement the diet of a patient with chronic hemolytic anemia, not amenable to control by splenectomy or corticosteroids, with folic acid to prevent this complication which obviously can be severe.

Summary

The occurrence of megaloblastic transformation of the bone marrow due to folic acid deficiency in a child with hereditary spherocytosis is described. The megaloblastosis of the bone marrow was completely reversed by the administration of folic acid. The factors which produced folic acid deficiency in the presence of hemolytic anemia are briefly discussed. It is suggested that it may be worthwhile to supplement the diet of a patient with chronic hemolytic anemia with medicinal folic acid to prevent this complication.

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Response of the Human Gravid Uterus to Intranasal Oxytocin

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THE RECENT INTRODUCTION of an oxytocic specifically packaged for intranasal administration and originally designed to enhance milk let-down in the postpartum period has renewed interest in utilizing this route of administration in the initiation or stimulation of labor. This route of administration for the purpose of augmenting uterine activity is not new. Hofbauer and Hoerner reported on their experience with nasal pituitrin in 1927.[2]

To evaluate the practicality, efficiency and safety of the application of oxytocin to the nasal mucous membrane, the following study was undertaken.

Multiparae at or beyond their estimated date of confinement, as calculated solely by menstrual history, were selected for the study. Neither consistency, effacement and dilatation of the cervix, nor station of the presenting part were considered in the selection of patients. Others included in the study were patients admitted to the labor unit with irregular contractions, but showing no progress as determined by failure of cervical dilatation, and one patient, calculated to be at term, with membranes ruptured for 24 hours but not in active labor.

The uterine response was evaluated by continuous recording of amniotic fluid pressure with the method described by Alvarez and Caldeyro.[1] A small polyethylene tube was inserted through an 18 ga. thin-wall needle into the amniotic fluid cavity. The tube was then connected to a pressure transducer and, after suitable signal amplification, a permanent recording in millimeters of mercury was obtained. In each patient, ample recording time was allotted to achieve a baseline of spontaneous uterine activity, prior to the administration of oxytocin. Both spontaneous activity and activity after uterine stimulation were calculated in terms of Montevideo Units, which are the product of the intensity and frequency of uterine contractions. The latter is calculated as the number of contractions occurring in 10 minutes.

Labor Induced in Only Four Patients

Sixteen inductions were attempted in 15 patients. The intranasal oxytocin employed was Syntocinon,† packaged in an aerosol-activated bottle designed to emit one International Unit of oxytocin (± 10 percent) with each depression of the tip. The frequency of administration and total amount given to each patient varied with uterine response, but never exceeded one I. U. in each nostril every 15 minutes and usually consisted of a total of four to six such applications.

In calculating the efficacy of this route of administration, the actual delivery date of the patient was utilized as the expected date of confinement. Six patients, who by this calculation proved to be in the 40th week of gestation, failed to go into labor with the administration of intranasal oxytocin and were discharged from the hospital only to return within one week in spontaneous labor. Labor was actually initiated in only four patients, one whose membranes were ruptured 24 hours prior to stimulation, one whose membranes were ruptured artificially

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† Manufactured by Sandoz Pharmaceuticals, P. O. Box 11, Hanover, New Jersey.

during the attempted induction, and 2 whose membranes ruptured spontaneously during the parenteral administration of oxytocin. Four patients delivered the second week, one in the fourth week, and one in the sixth week following the attempted induction.

Figures 1-3 are reproductions of 15 minute segments of continuous amniotic fluid pressure recordings. The intensity of uterine contractions is measured in millimeters of mercury, while time in minutes is recorded along the bottom of each tracing. The upper tracing in each figure represents spontaneous uterine activity; the lower tracing represents the maximum uterine activity recorded after the administration of intranasal oxytocin.

As indicated by the figures shown, the response of the gravid uterus to intranasally

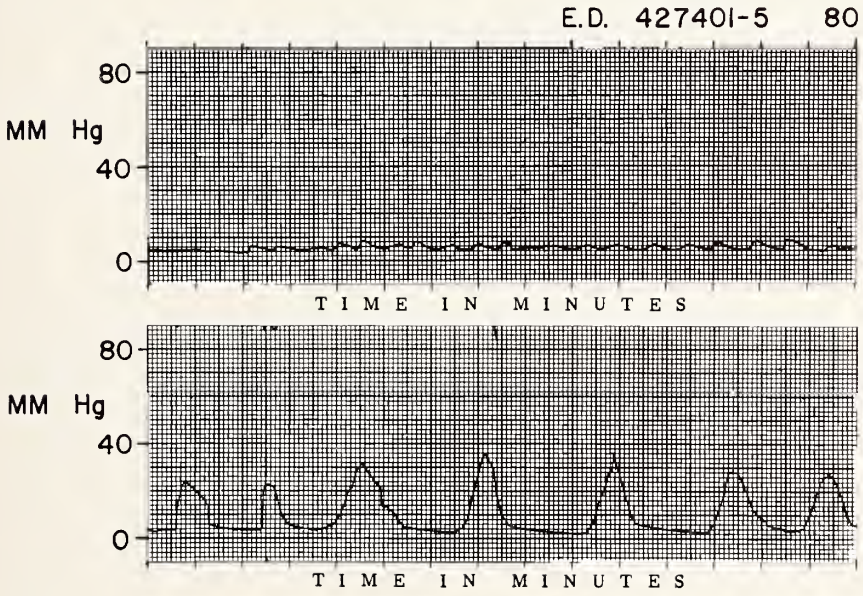


FIGURE 1

THE TOP TRACING represents spontaneous uterine activity in one of the ot-tempted inductions. The overage uterine activity in this segment is 25 Montevideo Units (M.U.). The lower segment shows uterine activity ofter intronasal odministration of 4 Internotionol Units of oxytocin, on overage of 102 M.U. Although a morked response to this stimulus wos noted, the potient did not go into spontaneous lobor until 37 doys loter.

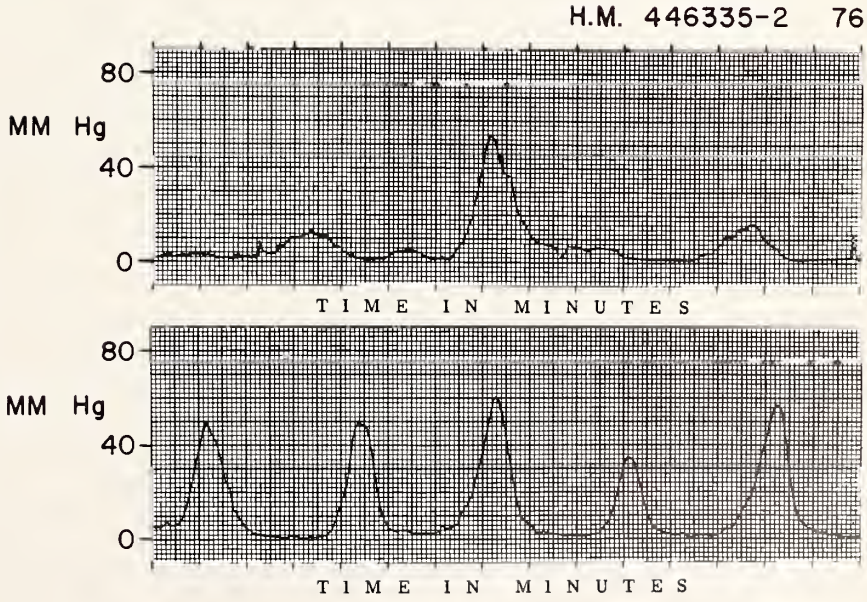


FIGURE 2

THE SPONTANEOUS ACTIVITY of this patient overaged 72 M.U. for the segment shown. After two Internotionol Units of intronosolly odministered oxytocin, the uterine activity hos been roised to 150 M.U. This potient's membrones ruptured spontoneously 24 hours prior to the recording. After this stimulotion, lobor promptly ensued ond delivery occurred shortly thereofter.

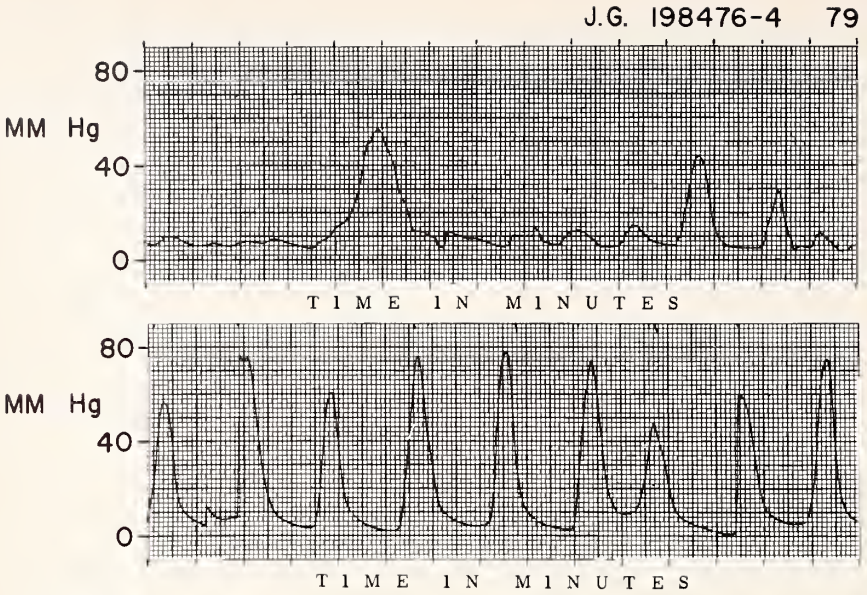


FIGURE 3
THE SPONTANEOUS ACTIVITY of this patient averaged 32 M.U., as seen in the upper tracing. The lower tracing indicates uterine activity of 370 M.U., following the administration of eight Units of intranasal oxytocin. Uterine activity subsided and the patient did not go into spontaneous labor until three weeks after the attempted induction.

administered oxytocin is extremely variable. Absorption of the agent from the nasal mucous membrane is dependent upon many local conditions and is probably influenced by scarring, transudates, exudates and total surface area. Attempts to increase the area from which the drug is absorbed by having the patient sniff as it is administered only produces irritation to the conjunctiva and nasolacrimal ducts. The response to the drug also depends upon the sensitivity of the myometrium to oxytocin which increases progressively during pregnancy.

From our initial observations, the fact that six patients did not go into labor with the administration of nasal oxytocin, but delivered within one week of the attempted induction, would indicate that this method of stimulation as utilized in this study provides a relatively weak stimulus to uterine activity. On the other hand, the uterus may respond with contractions of such intensity and frequency that had intravenous oxytocin been used, it would have been stopped immediately.

Conclusions

1. The response of the uterus to intranasal oxytocin is variable.

2. The method described here generally represents a weak stimulus to uterine activity and will be efficacious only where a weak stimulus is needed, i.e., to shorten the lag period between spontaneous rupture of the membranes and the onset of labor, or to enhance a desultory labor already in progress. In this respect, our initial attempts at quantitating uterine response agree with the experiences of Hendricks and Pose.[3]

3. Because the uterus will occasionally respond to nasal oxytocin with contractions of unusual intensity or frequency, observation of the patient must be as rigorous as when oxytocin is being administered by intravenous infusion.

4. To attempt to induce labor indiscriminately in patients at, or past, their estimated date of confinement by means of intranasal oxytocin alone will result in disappointment more often than success.

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*Case Report and Discussion**

Constrictive Pericarditis Complicating Acute Bacterial Pericarditis

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ACUTE CONSTRICTIVE pericarditis as a complication of purulent pericarditis is an uncommon occurrence. A recent report of Boyle, Pearce and Guze,[1] presented 11 cases of purulent pericarditis with an extensive review of the literature, including some 424 cases of which only 10 showed evidence of constriction.

This case was thought worthy of reporting because of the serious nature of this complication in spite of its relative rarity.

Case Report: A 30-year-old male automobile mechanic came to the Marion County General Hospital June 24, 1961, complaining of chest pain, shortness of breath, fever and saying, "I feel bad all over." This illness began suddenly one week before admission with cough, fever and malaise. The symptoms caused the patient to stop work and seek medical advice on June 21, 1961. At that time, a chest x-ray revealed increased bronchial markings and a transcardiac diameter of 13.5 centimeters with a transthoracic diameter of 29 centimeters. In the two days following, the patient became short of breath and developed a dull, oppressive anterior chest pain, which was aggravated by sitting up. There was no orthopnea.

His previous health had always been good. There were no known exposures to tuberculosis. However, he did admit to a rather heavy alcoholic intake at irregular intervals.

Physical examination showed an acutely ill man who was pale, sweaty and dyspneic. The vital signs consisted of a blood pressure of 80/70, temperature of 104°F, and a pulse rate of 130 per minute with marked pulsus paradoxus. The neck veins were distended to the ear lobes with the patient at a 45° angle. Chest was clear except for a few inspiratory rales in both lung bases. Apical impulse was imperceptible and heart tones were distant. A loud pericardial friction rub was heard over the entire precordium. There was tenderness in the right upper quadrant.

The hemoglobin was 15.4 grams, white blood count 15,700 with 80% leukocytes and 20% lymphocytes. Urinalysis findings were normal. An E.C.G. showed sinus tachycardia and ST-T changes compatible with pericarditis. A chest x-ray showed a transcardiac diameter of 16.5 centimeters with a configuration consistent with pericardial effusion. Sputum culture was consistently negative for mycobacterium tuberculosis and other pathogens. Intermediate strength P.P.D. was negative. However, second strength P.P.D. was positive.

Hospital Course

Pericardicentesis was performed on June 24, 1961, and 130 cc. of thick, foul-smelling material was aspirated. Five million units of penicillin were injected into the pericardial sac. This procedure gave the patient immediate and marked relief from his symptoms. His dyspnea improved, blood pressure increased to 110/70 and his pulse rate decreased to 98 per minute.

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Culture of the aspirated material was positive for alpha-hemolytic streptococcus. Smear and culture were both negative for mycobacterium tuberculosis.

Treatment with ten million units of aqueous penicillin intravenously daily was begun and continued over the next four weeks. During the seven days following pericardicentesis, the patient again became short of breath, developed venous distention, bilateral pleural effusion and marked hepatomegaly. At the same time he became disoriented and very restless. He was digitalized but this proved of no benefit.

On July 1, 1961, the venous pressure was 32 centimeters of water and a marked pulsus paradoxus was again present. A chest x-ray revealed the transcardiac diameter to be 18 centimeters.

A diagnosis of pericardial effusion with cardiac tamponade was made. Pericardicentesis was again performed and 500 cc. of thick, yellow pus was obtained. The same day pericardiotomy yielded another 500 cc. of material similar to that aspirated previously. Two large Penrose drains were left in place. The symptoms of cardiac tamponade improved rapidly.

By July 26, 1961, however, the patient developed evidence of cardiac constriction as manifested by a venous pressure of 25 centimeters of water, pulse rate of 130 per minute and marked paradoxical pulse with drop of pressure on inspiration of 35 mm. of mercury. The liver had enlarged to 10 centimeters below the right costal margin. Ascites and bilateral pleural effusion were also present. Cardiac fluoroscopy showed a transcardiac diameter of 14.5 centimeters. During cardiac fluoroscopy cardiac pulsations were described as very faint and not visible in some areas.

Pericardiectomy was performed on July 28, 1961, at which time a thickened, constricting pericardium measuring 5 millimeters in thickness was found (Figure 1). This was removed without difficulty. The postoperative course was marked by prompt relief of all symptoms. The ascites, hepatomegaly, pleural effusion and increased venous pressure all disappeared. The patient made an uneventful recovery and was released from the hospital August 18, 1961.



FIGURE 1
PHOTOMICROGRAPH of thickened constricted pericardium removed at surgery.

At the time of discharge, the venous pressure was 8 centimeters of water, pulse rate 62 per minute and the transcardiac diameter was 13.5 centimeters.

Discussion

No primary source for the pyogenic infection could be found. The organism from the effusion was a penicillin sensitive alpha-hemolytic streptococcus which grew quite readily. After the injection of intrapericardial penicillin the patient's pericardial fluid was found to be sterile on subsequent pericardicentesis.

Treatment of bacterial pericarditis with intrapericardial and systemic antibiotics plus pericardiostomy results in a 75% chance of recovery.[2]

The reasons for the development of constriction in a few patients following purulent pericarditis is unknown. Initially it was thought that constriction after purulent pericarditis would be the natural course of events. When this was not found to be the case, it was postulated that per-

haps the mortality was too high and occurred too soon for constriction to develop. However, since 1949 the overall survival rate for all purulent pericarditis has been 81%. Since this time two cases have been reported.[3,4]

In review of the 10 cases of acute constriction which were described in the literature, none was caused by streptococcus. Only two had both surgical and medical treatments prior to constriction and five were eventually treated with pericardiectomy after medical management alone. Four of these patients survived, the other three had only surgical management. All 10 cases constricted within two weeks to seven months.

Summary

A case of acute bacterial pericarditis which was followed within four weeks by constrictive pericarditis is presented. The causative organism was an alpha-hemolytic streptococcus. Despite intensive treatment the patient developed classical findings of constrictive pericarditis proven at surgery to be due to a markedly thickened pericardium.

This is a rare complication of purulent pericarditis. The reason for it remains unknown.

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Chemotherapy in Cancer Control

It seems to me that the incidence of neoplastic diseases will not likely decline of its own accord. Thus we may look ahead to the need for even greater efforts from all the disciplines of science before we can hope to reach this goal.

The fact that chemistry will have an important role in this dramatic achievement is quite apparent. All of us interested in this approach to the problem must be increasingly aware of the varied contributions chemistry will make in solving the riddle of neoplastic growth and in treating its disease manifestations.

It will be of benefit to our professions and to the goal we seek if all of us become as familiar as possible with current developments as chemistry assumes an ever more important place in achieving the complete control of cancer.—John R. Heller, M.D., President, Memorial Sloan-Kettering Cancer Center, in *The Percolator,* Feb.-March 1962.

Comparison of Tuberculin, Tine and Mantoux Tests With X-Ray Correlation*

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THE PRIMARY PURPOSE of this survey is to determine the extent of tuberculous infection among school children in Vanderburgh County (Evansville), Indiana, and to compare the efficiency of the Tuberculin, Tine test† with the Mantoux tuberculin test and to correlate the tuberculin tests with the x-ray findings.

The Tuberculin, Tine test is a transcutaneous one wherein four times concentrated U. S. Standard Old Tuberculin is dip dried on the tines of a metal disk fixed on a plastic holder. The unit is disposable and eliminates all the equipment needed for the Mantoux test. The strength of the tuberculin in the Mantoux test used in this study was 0.0001 mg. (5 TU) the so-called intermediate strength.

Simultaneous Tuberculin, Tine and Mantoux tests were performed on opposite forearms. Each test was read without viewing the opposite arm. The diameters of induration in both tests were checked if the lesion appeared to be less than 5 mm. Stereoscopic 4″ x 10″ x-rays were taken the same day that the tuberculin tests were made. The x-rays were read without knowing the results of the tuberculin tests. The two procedures were performed and the x-rays were read by the same physician.

This survey consisted of 2,760 eighth grade school pupils (ages 13 to 14) and 1,537 eleventh grade pupils (ages 16 to 17) (Table 1). They were considered a low-reactor group. Written parental consent was obtained for the privilege of making both the skin tests and the x-rays. Out of a total of 3,182 eighth grade students, 2,760 or 86.7% received consent. Out of 2,083 eleventh grade students, 1,537 or 73.7% obtained consent.

Technic of Application

A site on the volar aspect of the forearm was cleansed with alcohol and allowed to dry. One hand grasped the undersurface of the forearm below the site of application. This manipulation stretched the skin. The other hand disengaged the Tuberculin, Tine testing unit with the thumb and first and second fingers. This grasp was maintained and the disk was applied to the site with a firm downward pressure. Sufficient pressure was exerted so that the puncture sites and a circular depression of the skin from the plastic base were discernible. The disk was held in place for one second and discarded. Seldom did bleeding occur if the disc was applied where the veins were not visible. If bleeding did occur, a Band-aid was used, but the blood was not sponged from the puncture site.

The Mantoux tests were given in the usual manner. Individual sterile syringes and needles were used for each person.

Criteria of Interpretation

All tuberculin tests were read in 72 hours. In positive tests, elevation was quite evident and could be verified by passing the tip of the index finger over the lesion.

The minimal quantitative measure for positive reaction of the Tuberculin, Tine and Mantoux tests was that a lesion had to be elevated, indurated, and at least 5 mm. in diameter. Multiple lesions always measured at least 5 mm. The most common reaction consisted of the coalescing of all four puncture sites. The Tuberculin, Tine reaction persisted longer than that of the Mantoux in many individuals. Rosenthal[1] described as positive reactions one or more papules 2 mm. in diameter or more. Occa-

* This investigation was sponsored by the Vanderburgh County Tuberculosis Association and organized by Charles D. Lineback, Executive Director.

† Grateful acknowledgment is made to Lederle Laboratories Division of American Cyanamid Company for supplying the Tuberculin, Tine tests.

Student Participation in Skin Test and X-ray Study in Evansville and Vanderburgh County, Indiana—(School years 1960-61 and 1961-62)

School Group	Enrollment	Number Tested and X-royed	Percent Partici-poting
8th Grade Students:			
Catholic	725	603	83.1%
County Public	125	102	81.6
Lutheron	54	48	88.8
Metropoliton	2278	2007	88.1
Totol	3182	2760	86.7
11th Grade Students:			
Catholic	466	419	89.9
Metropolitan	1617	1118	69.1
Totol	2083	1537	73.7
Grond Totol 8th & 11th Grode Students	5265	4297	81.6

TABLE 1

sionally small red conical papules were evident in the Tuberculin, Tine test, but these were rare and were not considered diagnostic. This opinion was verified by the fact that none of the small separated conical elevations showed a parallel with a positive Mantoux reaction in the opposite arm. The cleansing of the skin with 70% alcohol certainly did not make it sterile, and 2 mm. conical papules or flat red areas at the puncture site represented either an insignificant inflammatory reaction due to bacteria or trauma. Two mm. flat reddened areas occurred infrequently.

In this series, 105 students with calcification, who were non-reactors to both the Tuberculin, Tine and Mantoux tests, were retested with second strength PPD and histoplasmin. Although both these tests were read in 72 hours, the height of the histoplasmin reaction occurred at 48 hours.

Tuberculin Test Results

Of the 2,760 eighth grade students tested and x-rayed in this series, 2,685 or 97.3% (Table 2-A) were non-reactors to both the Tuberculin, Tine and Mantoux tests. Seventy-five students were positive reactors to one or both of the skin tests, for a reactor rate of 2.7. Of the 72 positive reactors to the Mantoux test (Table 3-A), the Tuberculin, Tine reactors agreed in 64 cases, or 88.9%. The Tuberculin, Tine disagreed with, or was false-negative to, eight Mantoux reactors, and was false-positive to three Mantoux non-reactors. The Tuberculin, Tine agreed with 2,685, or 99.9% of the Mantoux non-reactors.

Of the 1,537 eleventh grade students tested and x-rayed in this series, 1,483 or 96.5% (Table 2-B) were non-reactors to both the Tuberculin, Tine and Mantoux tests. Fifty-four students were positive reactors to one or both of the skin tests, for a reactor rate of 3.5. Of the 47 reactors to the Mantoux test (Table 3-B), the Tuberculin, Tine reactors agreed in all cases for 100% agreement on positive reactors. The

Tuberculin Reactors and Non-Reactors on 4,297 Eighth and Eleventh Grade Students

School Group	Number Tested and X-rayed	Non-Reactors and Percentage of Totol Tested		Positive Reactors and Percentoge of Totol Tested	
		Number	Percent	Number	Percent
A. *8th Grade Students:*					
Catholic	603	587	97.3%	16	2.7%
County Public	102	100	98.0	2	2.0
Lutheron	48	48	100.0	0	0
Metropolitan	2007	1950	97.2	57	2.8
Totol	2760	2685	97.3	75	2.7
B. *11th Grade Students:*					
Catholic	419	407	97.1	12	2.9
Metropoliton	1118	1076	96.2	42	3.8
Totol	1537	1483	96.5	54	3.5
C. *Grond Total 8th ond 11th Grode Students*	4297	4168	97.0	129	3.0

TABLE 2

Tuberculin, Tine was false-positive to seven Mantoux non-reactors, but agreed with 1,483, or 99.5%, of the Mantoux non-reactors.

Of the entire 4,297 students tested and x-rayed, 4,168, or 97% (Table 2-C), were non-reactors to both the Tuberculin, Tine and Mantoux tests. One hundred and twenty-nine were positive reactors to one or both tests, for an overall reactor rate of 3.0. In the entire series (Table 3-C), the Tuberculin, Tine test reactions agreed in 93.3% of the Mantoux reactors and agreed in 99.8% of the Mantoux non-reactors.

X-Ray Results

Of those 2,685 (Table 2-A) eighth grade students who had negative tuberculin tests, 2,602 (Table 4-A) were negative for lesions of tuberculosis. Eighty-two had calcification, either primary tuberculosis or fungus, one had secondary tuberculosis, inactive. Of the 75 (Table 2-A) who had positive tuberculin tests, 68 of these were negative for lesions of tuberculosis, five had calcification, either primary tuberculosis or fungus, and two had secondary tuberculosis, inactive.

Of the 1,483 (Table 2-B) eleventh grade students who had negative tuberculin tests, 1,424 (Table 4-B) were negative for lesions of tuberculosis, 59 had calcification, either primary tuberculosis or fungus. Of the 54 (Table 2-B) who had positive tuberculin tests, 46 were negative for lesions of tuberculosis, six had calcification, either primary tuberculosis or fungus, and two had secondary tuberculosis, inactive.

Of the 4,168 (Table 2-C), who had negative tuberculin tests, 4,026 had no evidence of lesions of tuberculosis, 141 had calcification, either primary tuberculosis or fungus, and one had secondary tuberculosis, inactive. Of the 129 (3%) (Table 2-C), who were positive to the skin tests, 114 did not reveal lesions of tuberculosis, 11 had calcification, either primary tuberculosis or fungus, and four had lesions of secondary tuberculosis, inactive.

Histoplasmin and PPD Results

One hundred and forty-one students showed pulmonary calcifications and were negative to tuberculin, while 11 showed pulmonary calcifications and were positive to tuberculin. Parental consent again was obtained to test 105 students who were negative to the Tuberculin, Tine and intermediate strength Mantoux (0.0001 mg. per dose) with PPD second strength (0.005 mg. per dose) and histoplasmin. All tests were read in 72 hours.

Of the 105 students re-tested, 15 students showed reactions to second strength PPD. Of the 15, 12 were positive to PPD and histoplasmin, while three were positive only to second strength PPD. Of the 105 students re-tested with PPD second strength and histoplasmin, 94 or 89.5% were positive to histoplasmin although 12 of the 94 were also positive to second strength PPD.

Eight students were negative to two strengths of PPD and to histoplasmin and yet had evidence of calcification.

Comment

In 1941, 1,556 ninth grade students of the Evansville schools were skin-tested and x-rayed.[2] An intermediate strength PPD (0.001 mg. per dose) and the Vollmer patch test were used. The reactor rate to tuberculin was 17. In 1961-62, the reactor rate to similar strength tuberculin was 3, or a decline of 82% in reactor rate in comparable groups. In 1940, when the work on the 1941 series was performed, the number of new cases of tuberculosis reported in Vanderburgh County was 143. In 1960, the number of new cases reported was 50, a decline of 65%. In 1940, there were 71 tuberculosis deaths in the county, while in 1960, there were only six such deaths, a decline of 91%. These declines—tuberculin reactor rate, new tuberculosis cases reported, tuberculosis deaths—all occurred in a 20-year period when the population in the county was experiencing an increase of 26%. It is evident that the case finding program and isolation of active tuberculosis cases has been effective.

Parental consent is not necessary for an x-ray survey only, and hence, more students will accept x-ray than tuberculin tests and x-ray. However, since the majority of those students who are infected with tuberculosis have negative x-rays (Table 4), the method of tuberculin testing and x-raying the positives is more informative and valuable to

Agreement and Disagreement of 129 Tuberculin, Tine and Mantoux Reactors

A. 2760 Eighth Grade Students, Age 13-14

Mantaux Reactions	Tuberculin, Tine Reactians Pasitive	Negative	Tatal Number	Percent Agreement	Percent Disagreement
Pasitive	64	8	72	88.9%	11.1%
Negative	3	2685	2688	99.9	0.1

B. 1537 Eleventh Grade Students, Age 16-17

Mantaux Reactians	Tuberculin, Tine Reactians Pasitive	Negative	Tatal Number	Percent Agreement	Percent Disagreement
Pasitive	47	0	47	100.0%	0%
Negative	7	1483	1490	99.5	0.5

C. 4297 Eighth and Eleventh Grade Students

Mantaux Reactions	Tuberculin, Tine Reactians Pasitive	Negative	Total Number	Percent Agreement	Percent Disagreement
Pasitive	111	8	119	93.3%	6.7%
Negative	10	4168	4178	99.8	0.2

TABLE 3

Comparison of Tuberculin Tests and X-ray Findings on 4,297 Eighth and Eleventh Grade Students

School Graup	Tatal Tested and X-rayed	X-ray Results an Negative Tests: Negative far TB	Primary TB ar Fungus Calcifi-catian	Secandary TB Inactive	X-ray Results an Pasitive Tests: Negative far TB	Primary TB ar Fungus Calcifi-catian	Secandary TB Inactive
A. 2760 Eighth Grade Students							
Cathalic	603	575	12	0	16	0	0
Caunty Public	102	97	2	1	2	0	0
Lutheran	48	48	0	0	0	0	0
Metrapalitan	2007	1882	68	0	50	5	2
Tatal	2760	2602	82	1	68	5	2
B. 1537 Eleventh Grade Students							
Cathalic	419	392	15	0	10	2	0
Metrapalitan	1118	1032	44	0	36	4	2
Tatal	1537	1424	59	0	46	6	2
C. Grand Tatal 4297 Eighth and Eleventh Grade Students	4297	4026	141	1	114	11	4

TABLE 4

the individual. In turn he or she can be educated to realize that when illness involves the lungs, an x-ray is indicated, and, if he or she can afford it, periodical x-rays should be taken.

Group x-raying immediately conveys to the individual that he does or does not have lesions as evidenced by x-ray while a positive tuberculin reaction worries the individual until x-rayed. Either group x-raying or group tuberculin tests followed by x-raying the positive reactors represents adequate case finding of tuberculosis in this area where most groups are low-reactors.

Quantitative analysis of the intensity of the tuberculin reaction is of scientific value to the clinician, but in a survey of this kind, a positive or negative reaction is the primary objective, and since no reaction was herein recorded unless it measured 5 mm., this report is valid for statistical comparison. Stein and Hetherington[3] advocate quantitative comparison of areas in degree of sensitivity of tuberculin. Most important, we feel, is the immediate follow-up of the positive reactors with an x-ray to determine the extent of the infection and the need for treatment.

Although we used 70% alcohol to cleanse the forearm, we recommend acetone since it dries faster and removes fatty substances from the skin. In the beginning disposable needles were used, but were found unsatisfactory because the occasional one does not fit the syringe tightly.

One should not be critical of the slight difference between the Tuberculin, Tine and the Mantoux test reaction rates since there is disagreement ofttimes with the Mantoux test on different arms of the same individual. Meyer, Hougen, and Edwards,[4] using 6 mm. of induration as the border line, found the positive reaction on the right arm in 10.5% of persons who had a negative reaction on the left arm. Conversely, 16.2% of the positives with 6 mm. to 9 mm. induration on the left arm had a negative reaction on the right arm. Of the strong positive reactors—more than 10 mm. of induration on one arm—1.9% were negative on the other arm. Rosenthal[1] stated that the percentage of false-positives and false-negatives produced by the Tuberculin, Tine test are strikingly similar to those found when 5 to 10 TU were given by the Mantoux test method simultaneously on both arms.

We believe the eighth grade is the ideal grade in which to use the tuberculin tests —first, because many eighth grade students do not go to high school, and they are acquainted with their tuberculin reaction before leaving school—second, the eighth grade student is able to realize the significance of the tests and ofttimes is able to encourage the parents to give consent—third, the teacher and the public health nurse are able to instruct the student about the significance of having a tuberculin test and the follow-up indicated for a positive reaction; 85% parental consents in this series confirms this opinion.

The Tuberculin, Tine test represents a tuberculin test which can be utilized by nurses and non-medical personnel and in turn diminishes the need for a physician until follow-up of the positives with x-rays is necessary. Since physicians are not required to perform the Tuberculin, Tine test like the Mantoux test, tuberculin testing with the Tuberculin, Tine will increase the number of students tested.

Summary

1. In this series of 4,297 school children ages 13 to 17, 97% were negative to the tu-

Results of Histoplasmin and 2nd Strength PPD on Students with X-ray Calcification

	Totol Number Tested	Positive to 2nd Str PPD only	Positive to Both 2nd Str PPD ond Histoplasmin	Positive to Histoplosmin only	Negotive to Both 2nd Str PPD ond Histoplasmin
Previously Negotive to Intermediote PPD and Tuberculin, Tine	105	3	12	82	8

TABLE 5

STUDY OF TUBERCULOSIS STATISTICS IN VANDERBURGH COUNTY

1940-41 Figures Compared with 1961-62

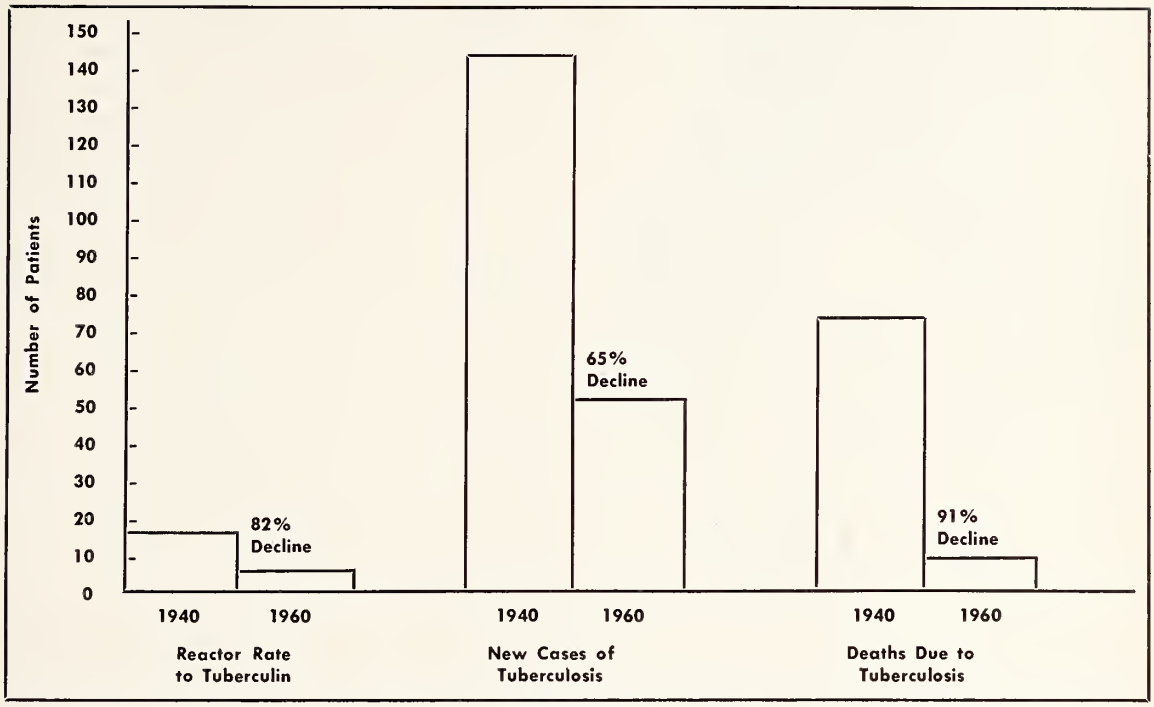


CHART I

berculin tests—PPD, in ·mediate strength, and the Tuberculin, T ₂ (4 TU), while 3% were positive to the tuberculin tests.

2. The Tuberculin, Tine test (4 TU) compares favorably with the Mantoux test, 0.0001 mg. The Tuberculin, Tine test was parabolic with the Mantoux on 4,168 non-reactors or 99.8%. The percentage of agreement of the Tuberculin, Tine positives with the Mantoux positives was 93.3% whereas disagreement was 6.7%.

3. Four thousand one hundred and forty had negative x-rays for lesions of tuberculosis. Eighty-eight and four-tenths percent of those positive to tuberculin had negative x-rays.

4. There were five cases who had lesions of secondary tuberculosis, inactive. One hundred and fifty-two showed calcification in their x-rays—141 with negative tuberculin tests and 11 with positive tuberculin tests.

5. Parental consents were obtained to test 105 of those students with calcification. Eighty-two were negative to the Tuberculin, Tine, intermediate PPD and second strength PPD but were positive to histoplasmin. The majority of calcifications (89.5%) in x-rays of the lung in this locality are histoplasmosis.

6. Since the majority of those students who are infected with tuberculosis have negative x-rays, the method of tuberculin testing and x-raying the positive reactors is more informative and valuable to the clinician.

7. The Tuberculin, Tine test can be used by nurses and non-medical personnel when physicians are not available. This test followed by x-ray examination of positive reactors will furnish adequate verification of tuberculosis among school children.

8. The Tuberculin, Tine test is sufficiently reliable to be classified as a forward step in facilitating skin testing in the physician's office and in survey projects.

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Indian Remedies

Last summer as I camped with some Miami Indians,* I noticed one of them each day as he squeezed milkweed juice on a wart which had appeared on his index finger. A few days later the wart had disappeared—whether from the effects of the juice or not, I am not in position to say.

A week or two later, however, I noticed this same Indian getting the roots from a wild blueflag iris which grew at the water's edge. He often chewed this root or roots, or merely held them in his mouth. When asked the reason for this behavior he said that it was the Indian remedy for a sore mouth. As the mouth trouble also ceased bothering him in a few days I asked for other Indian remedies which had been passed on to him by his mother or his grandfather, Chief White Blossom. The following are some interesting ones which I will pass along. I'm not sure that some of these have not been accepted by modern medical science.

The Indian remedy for asthma was a mixture of raspberry and blackberry juice in which leaves from the hoarhound and spearmint had been boiled.

For burns, the remedy was bark from the white oak (Quercus alba) which had been soaked in water. This would be tannic acid and is actually our accepted remedy for burns. We buy tannic acid in powder form from drug stores or get it directly from doctors.

The remedy for stomach disorders was mayapple (mandrake) roots.

Dried wild grapes were used for boils and skin disorders. The bark from the black willow tree (Salix nigra) was also used as a remedy for skin troubles. It is common knowledge to most of us that sassafras was used as a spring tonic and blood thinner.

Spicebush (Lindera benzoin) was also used as a remedy for aches and sluggishness much as our vitamin pills at the present time—not quite so costly, however.

Chestnut leaves were used for coughs, especially whooping cough. Mullein leaves were used for bee stings. Leaves of prickly ash were used for mosquito bites and infections.

Red elm leaves were crushed and used as a poultice for rattlesnake bites. The medicinal value of this remedy would probably be scoffed at by most present-day doctors. Even they, however, recognize the psychological effect of such things.

Although the Indian didn't know about our Bible, aren't we reminded of Revelations 22:2—

"The leaves of the trees were for the healing of the nations." Reprinted from *Outdoor Indiana*, Jan. 1963.

* "Nobility in Our Midst," Wendell Lamb, *Central States Archaeological Journal*, Vol. 8, No. 1, pp. 18-19, January, 1961.

The Case of The Martyred Mother

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THE ASPHALT JUNGLES of a great city's slums are saturated with sin and sadness; they reek of squalor and sweaty soot. The physicians manning the free clinics of our "name" hospitals become rather inured to the constant repetition of the dreadful, drab, dreary details droned out by the denizens of those few blocks comprising the "district" allotted to that Outpatient Department. After 35 years of this sort of thing, I had thought that nothing— but nothing—could penetrate the facade of my composure. The case of Conchita Quinones, however, has left me scarred and shaken: I am still vulnerable, after all.

The term, martyr, is a monstrously misused word. The original Greek meant *witness*: Stephen was the first Christian martyr because, even unto death, he bore *witness* to the truth of the Gospel. By logical extension, great afflictions and sufferings are endured by martyrs defending unpopular political and other causes.*

Terrible torments can also be inflicted upon literally millions of people utterly undesirous of wearing the anguishing crown of martyrizing thorns. The Nazi visitation is only too fresh in our memories. Any visitor to Jerusalem should go up Mount Zion and visit, not only King David's Tomb, but also the Yad V'Shem, Memorial of Destruction. The guttering candles lighting the endless rows of white plaques memoralizing the vanished congregations make more real the invocation of the 6,000,000 martyrs butchered by Hitler's Einsitzgruppen.

A *calamity* may afflict the entire world; the Black Plague ravaging entire continents during the Middle Ages serves as an example. A *catastrophe* may be the destruction of the single person pinned under the wreckage of an overturned, flaming gasoline carrier.†

The life story of Conchita Quinones is a phantasmagoric recital of continuous catastrophe relentlessly ravaging an obscure, uncomplaining drudge. I have leafed through her OPD folder; the record is a good inch

* After Christianity had become a dominant religion, the terrible inquisitor of 15th century Spain, Torquemada, martyred the Marranos and Moriscos as relapsed conversos. Some 2,000 Jews alone were cremated alive at the stake, "the bodies being burned to save their souls." Very few people today remember the uncle of this fanatic. He was Johannes, Cardinal de Turrecremata, prime figure of the Councils of Constance and Basel.

† There is an apocryphal anecdote attributed to Sir Winston Churchill. He is quoted as saying, "Were Hitler to be aboard a yacht and fall overboard, that would be a catastrophe; were anyone to rescue him, that would be a calamity."

and a half thick and goes back to 1955. From it, I obtained the leads to other hospitals, police files, social service investigators. There was nothing cheerful, each casual entry more gruesome and horrible than the preceding! A life buffeted constantly between Scylla and Charybdis. One need not have the temerity to try to imitate Anatole France, Maxim Gorky or even that famous physician, victim of T.B., Anton Pavlovich Chekhov. The naked facts need muting, not elaboration; they are their own appalling witnesses.

Childhood of Bloody Memories

Conchita is stated as having been born on 1/21/32; such precision is silly. *Probably*, she was born in Western Spain at the beginning of the thirties. She does remember that it was a little village near Badajoz. Her earliest childhood she cannot recall; her family was tenant farming for some wealthy Spanish grandee. She *thinks* that she had three or four siblings all older than she. She recalls distinctly the shadowy figure of her mother having a "coughing fit" during which she splattered blood "all over the place."

The next harrowing event she recalls vividly; gun-fire, explosions, their village being set afire, "many black soldiers in bright uniforms and funny hats" killing, pillaging and raping. . . . Her own father had his head split open; her mother manhandled and stripped naked; when she coughed and sprayed bloody vomitus on the Moroccan mounting her, the brute retaliated by pinning her to the bed with his bayonet. Conchita was still only four and so had been small enough to hide in a burrow of the wretched hut where she was simply overlooked.

Conchita witnessed the obscene butchery of her brothers and sisters by Franco's "liberating army." You can see now how we can pinpoint the year as 1936; even the day and place are definite: the major curtain raiser of the bloody Spanish Civil War was the massacre at Badajoz. Remember Garcia Lorca, the lyric poet? *Martyred* by Franco's soldiery?

Anyhow, in some no longer recalled fashion, the orphaned waif escaped to a neighboring settlement. A distant relative, apparently a great-uncle, assumed her care. The whole group fled westwards and crossed the border to Portugal. Conchita has only fragmentary memories of the next couple of years. No one seems to have bothered too much about the fate of these wretched, starving peasants who blended so well into the bleak Iberian landscape.

It seems that this great-uncle got some sort of job on a boat. Conchita has vague recall of a South American favela; Georgetown in British Guiana she can name definitely, it was there that she acquired a smattering of English. Before she was ten, Conchita was running errands for the cook of an American official. Along with other baggage, she was moved to "someplace in Cuba with a lot of soldiers"—Guantanamo? Eventually, her great-uncle and she reached New York. This was just about at the end of World War II and Conchita must have been all of 14.

The great-uncle wandered to a job in a



Conchita worked as a slavey.

bottom class restaurant on the edge of Hell's Kitchen. Conchita worked as a slavey in this hash joint. She also did the housekeeping in a tiny cold water walk-up apartment they shared. One day, the great-uncle got involved in one of those aimless brawls—instead of separating the two customers, he got in between. The cracked skull sent him to the hospital where he died from complications.

A "Battered" Child Bride

Conchita was left alone—but not for long. A particularly unsavory tenant of the "hotel" above the restaurant had eyed Conchita often. The budding nymphet attracted the odious ogre irresistibly—need I sketch in the details of the Lolita tale—stripped of all Nabokov glamour and reduced to its grimy essence. The old satyr managed to drag the youngster to City Hall, get a license and then compound the villainy by inveigling Conchita to the neighborhood church for the formalizing mockery of a wedding.

So Conchita was now *legally* Mrs. Pablo Quinones; also, her age had been inflated to 34—her aged husband had the cunning to know that fewer questions would be asked were he to simply ADD the couple of extra decades. Conchita's marital martyrdom is the tale that has to be muted—how can one embroider the sheer horror of her new life! The perversions—the sadistic bestialities* —the sheer accumulation of daily, battering beatings: brutal bruising of body and brain!

In such New York purlieus as the Bowery and Harlem, one can see many broken ex-prize fighters and bum bouncers: the cauliflower ears, the broken noses, the puffy lips protruding over snags of decaying tooth roots and—above all—that peculiar mask formed by the remnant of the human face where the skin has been pounded into a pulp so many times that the scarring and uneven healing underneath has removed all pliability from the dermal cover. Well! Conchita acquired all these things and more! From here on in, I no longer have to rely on the woman's fragmentary tale eked out by case workers' records and such other help. Every year Conchita was in this or that hospital or dispensary: "broken clavicle," "fracture of surgical neck of left humerus," "fractured ribs" (three times), "fracture of body of lumbar vertebra No. 5," broken knuckles (all), fingers and finger nails (uncounted times)—talk of the "battered baby" syndrome!

As I leaf through the incredible sequence, I am gnawed by a mystery—Why did no one bother about the Quinones household? How was it possible to have such activities condoned? Why did not Conchita desert this spawn of Satan?

And then, the item, "repair of rectal tears!" After that she had three children in rapid succession:

John Paul Quinones—born 2/2/50;

Anna Maria Quinones—born 3/24/52;

Maria Luisa Quinones—born 8/23/53.

The son was a deaf-mute with many signs of gargoylism; the oldest daughter was a club-footed youngster who also had an extreme form of congenital scoliosis that progressed into an extremity of body contortion defying sane analysis; the second daughter suffered from Down's syndrome, she was a mongoloid. . . .†

Even while muffling the fearsome facts, we must continue with more extracts from Conchita's file. The repeated blows on the head had ruptured her eardrums; hearing aids were not of too much value. Also, her vision began to fail, for the same basic reason. In his ardors, her husband had not only been blacking her eyes but had also been digging his fingers into them; the lenses were dislocated and the retinae

* The Marquis de Sade was sufficiently vicious to have been condemned to death in most tolerant Bourbon France in 1772. Still only 32, he managed to escape and flee, he was re-arrested and finally committed to an insane asylum. His obscene writings gave him the notoriety of bestowing his name to the heinous offences under discussion. He died in the Charenton Lunatic Asylum in 1814. Some of our younger, insecure and befuddled beatniks think that there is an aura of sophistication hovering over conversation anent this man's writings. My opinion of them would singe this paper.

† See "Gender: Dubious" *J.I.S.M.A.*, Vol. 55, No. 8, pp. 1165-1170.

had begun to become detached. Several eye consultants thought the case hopeless. Finally, she was seen in the clinic by Dr. Ramon Castroviejo†. The surgeon was not at all sanguine but he did undertake the task.

The repeated operations were spectacularly successful; I have had the privilege of seeing the results. The retinae were reattached; the lenses were removed; corneal grafts replaced the clouding scars with clear windows; her vision was saved!

Hope for a New Life Dawns

While in the hospital for all these lengthy procedures, the Catholic charities took care of the children. The sisters did more than well: even the dry, brief entries reflect the special attention being lavished on this brood! Yet—Why was Conchita permitted to go back to her sadistic spouse? Finally, however, there is a two line entry that gives a cheerier gleam to the record. Pablo Azadon Quinones had been taken to Bellevue, screened psychiatrically and committed to King's Park Asylum! Why the interminable passage of all those years in which he was satiating his satanic lusts on this wretched woman?

Belated *peace* came to Conchita and her progeny; the group was moved to a fairly decent flat; with vision restored—even if almost totally deaf—she was at liberty to resume life: there was no one to inflict foul, torturing abuse upon her.

The clinic's record is now full of visits by Conchita escorting her children for treatments. Also, arrangements were made for plastic repair of her mangled face, broken nose, etc.

5/2/58—"Patient forms for convalescent care given by social worker. Mrs. Quinones is grateful for the convalescent care but she wants to be home for her son's first communion. . . ."

It was during these years that I became rather well acquainted with Conchita. Actually, my memory for names is terrible but faces I do remember and . . . well! WHO could ever forget one's first sight of *that* plastic reconstructive marvel! Imagine a real live Japanese geisha-type of face set in its rigid, fibrotic, Parkinsonism-like grimace! Not the scarred mug of a broken down pug but the stolidity of almost immobile features set in a mask, draining human fluidity from that perfectly chiseled visage! That flawless nose; the absolutely right little ears; the magnificent dentures exposed as she articulated slowly! And those widely dilated, glittering pupils—belladonna could do no more. And she was so CLEAN about herself and her children . . . And she was *so* pathetically grateful for every little crumb of help doled out to her!

I took a second look at the chart and a third look at her. After all, that is what brought her to me: the facial surgery was still very painful and she needed physiotherapy, gentle boric acid compresses, antihistamines, judicious quantities of steroids, sedatives—her path through life was still a Via Dolorosa. Conchita's resignation was truly stoic; her acceptance of Fate's assaults was unquestioning. However, the social worker did insert the note that, "patient was nervous"

It was the next time that I spotted her children. Wherever she went, they went with her: all three—the gesticulating deaf-mute gargoyle, the hideously hump-backed, deformed older girl dragging her club-feet and the mongoloid! The nice new resident accompanying me stopped to stare; as he gawked I saw him crossing himself! I do not think he was aware of his devout gesture!

Conchita kept herself and her grotesque Quasimodos clean, well-behaved and orderly. As she would await her turn, I could observe her reading a book, usually a Bible. Of course, she had never gone to school but somewhere she had become literate. Alternatively, she would busy herself with some little chore for one of the children. I even noticed that she appeared to love the older girl the most; maybe, this was due to the fact that this was the only child with which real communication was possible.

† I have refrained from pinpointing the exact clinics, hospitals, etc., as I had not wanted to have the chore of getting written permission to use the names. I have NOT spoken to the distinguished ophthalmologist; I trust he won't mind my praise.



". . . visits by Conchita escorting her children. . . ."

The magnificent surgery plus the many other features of this case had made me consider writing up the record. The many beautiful microphotographs would illustrate the unbelievably marvelous masterpiece of surgical precision that surely would appeal to an appropriate audience. The resident doubted that his modest chief would approve the undertaking.

Fate's Cruelest Blow

And then—just last week—Conchita's Via Dolorosa plummeted her, downhill, into the unfathomable abysses of Hell! I had come to the clinic as usual; Conchita was sitting on the bench. She was not reading a book; nor was she busying herself with one of her brood. She was muttering softly to herself; only two of her youngsters were on the seats beside their mother. As I was putting on my white coat, I casually asked the nursing supervisor, "Where is that hunchback of Conchita's?"

The sister looked at me gravely and quietly, "Haven't you heard? Somebody enticed the child into the basement of a neighboring tenement. She was raped and killed. For the last two days, Conchita has just been sitting and waiting for the girl to come home. She just sits there repeating over and over again, 'Anna Maria: Come in, I tell you! You must not stay out so late'."

"I guess she has finally cracked up; Pobrecita!" The nurse crossed herself slowly and reverently as she cast compassionate eyes toward the demented woman sitting there so patiently—and so hopelessly.

The medical examiner who had performed the autopsy had told me some of the unmentionable details of the case; it was just that I had taken no note of the name and so had not associated Conchita with it.*

Maybe I had been unduly tired that day; maybe the sight of that tragic figure merely sitting there did something to my usually well-trained reserve. For just about the first time in my 35 years of medical practice, I felt a retching revulsion. The sister must have observed me blanching for she reached for a basin and asked me with quiet solicitude, "Shall I give you an injection of Compazine?"

In spite of shaking hands and queasy quiverings, I declined, sat down and wrenched myself back under control. Although it was difficult, I managed to get a psychiatric consultation. Somehow, the two remaining, pitiable, wailing waifs were shepherded away and taken care of. All that I could do was to enjoin the committing physicians, "Don't send that *martyred mother* to King's Park! Whatever you do, don't let her be near that foul monster, her husband!"

"Oh, we won't. Anyway, some judicious shock therapy will bring her back."

"With her mazel, she'll fracture a vertebra and have a cardiac arrest!"

I just sat there staring out of the window; I was in no mood for work. Again the nursing supervisor came to me. We had worked together in that clinic for many years; yet it was the first time she had placed a hand on my shoulder, "Doctor! You come here faithfully and work diligently! Why? Not for the money you don't get." Indicating her habit, she went on, "I have renounced the pleasures of the world for something worth more than worldly gain."

"You are a Jew and I am a Christian. We

* Talk of muting facts: ritual cannibalism was almost the least of it. . . .

both serve the same God; we must believe in His infinite mercy and illimitable wisdom. I know that many wise scientists say that there are only electron clouds, mathematical expressions, empty space — and nothing else! But that way is mad futility! Surely, we each, in our own way, affirm His purposes and truths! It is hard at times to look at things such as we have just seen. But we must realize that it is our frail humanity that fails to comprehend His greater purposes."

The sister was not preaching; she was speaking softly and quietly trying to soothe me: just as she had been calming, moments before, Conchita's children. Truly and most devoutly—I wish I had within me even a fraction of her total acceptance of God's decrees. . . . ◄

1270 Fifth Ave.
New York, N. Y.

Lead Poisoning Due to Illicit Whiskey

". . . In the Southeastern section of the United States it has been estimated that approximately 50,000,000 gallons of illicit whiskey are produced each year. Much of this "white lightning" is fermented in crudely constructed stills, in many cases using discarded automobile radiators as condensers.

"Escu and others[2] analyzed the lead content of the distillate in mash samples seized from varying illegal stills. Large quantities of lead were found in many of the samples tested. These authors postulated that the lead ions entered the final distillate not only from the automobile radiators used, but also from crudely soldered pipes and conduits through which the final product passed. In certain sections it is common practice to add old automobile batteries to the mash.[3] When asked why this was done, one bootlegger answered, 'Why, Doc, we puts the battery in because it strengthens the whiskey good and gives it such a piquant flavor.' Strange as it seems, this practice is not without precedent. In the nineteenth century it was the custom in many parts of Austria to put a piece of lead in the wine barrels since the superfluous acid was supposed to be absorbed by the metal, thus improving the flavor.

"The various types of home-produced alcoholic beverages constitute a world-wide problem. Recently in England, a case of acute lead poisoning was attributed to homemade wine.[4] Ripe elderberries were first fermented in an earthenware vessel. This container, called a jowl, was a relic of an age when such containers were glazed with soft lead. The acidity of the wine had cracked and pitted the glaze, and the beverage thus became heavily contaminated with lead."—Acute Lead Encephalopathy Due to Ingestion of Illicit Whiskey, Robert W. Willett, M.D., *North Carolina Medical Journal*, January, 1963.

[2] Escu, A. E., and others: Lead Poisoning Resulting from Illicit Alcohol Consumption *Jour. Forensic Sciences* 6:337-350, 1961.

[3] Findley, T.: Chronic Lead Poisoning *J. Med. Assn. Georgia* 48:468-473, 1959.

[4] Whitehead, T. P., Prior, A. P.: Lead Poisoning from Homemade Wine *Lancet* 2:1343-1344, 1960.

Electrocardiogram of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Krannert Heart Research Institute, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

Atrial Infarction

CHARLES FISCH, M.D.
Indianapolis

THE ST-T segment of atrial repolarization (P-Ta) is normally obscured by the QRS complex and for this reason atrial infarction is rarely diagnosed during routine electrocardiographic study. This complication may be suspected when a patient with a myocardial infarction develops atrial arrhythmias and may be diagnosed with certainty when the P-Ta segment is displaced. The latter can be registered when an atrial infarction is complicated by A-V block. In this situation the P-Ta segment is brought "into the open."

Figure 1 is a relatively rare electrocardiographic example of an atrial infarction. The basic rhythm is one of complete A-V block with a ventricular rate of 30 (lead AVF) and atrial rate of 100. The ST segments are elevated in leads II, III, AVF and show reciprocal depression in leads I and AVR. Subsequent tracings, not shown here, disclosed evolution of diaphragmatic infarction with appearance of Q waves in leads II, III and AVF.

At first glance the P waves in leads II, III and AVF appear extremely broad, measuring approximately .32 seconds in duration. The major portion of this "broad" P wave is actually a displaced S-T segment of the P wave (P-Ta), a hallmark of atrial infarction. The P-Ta segment is elevated in leads II, III and AVF and depressed slightly in I and more so in AVR and AVL.

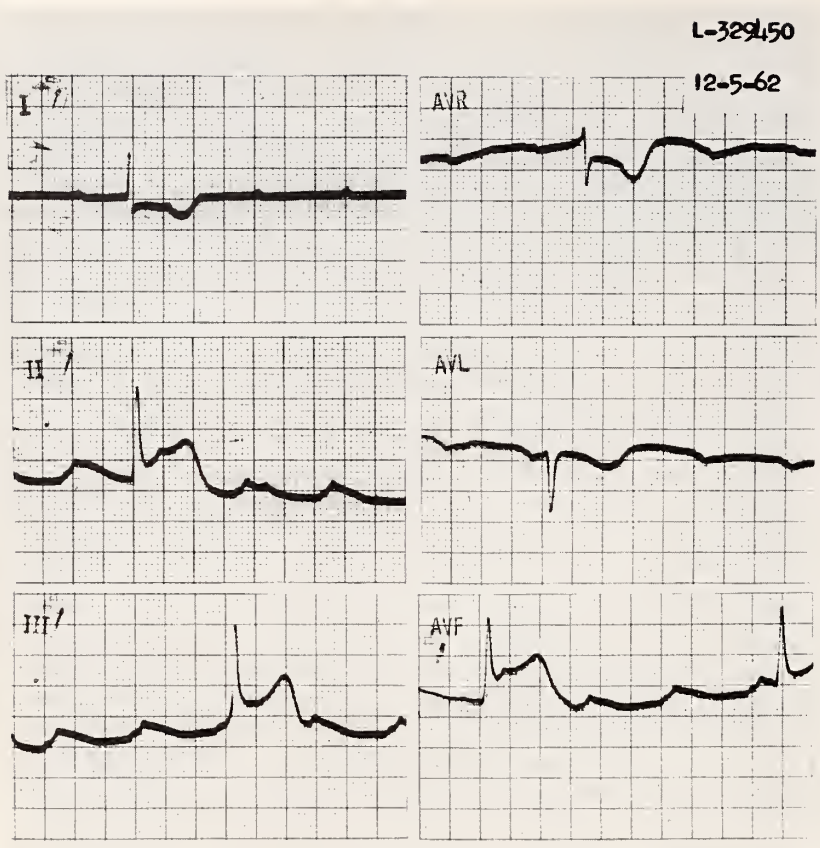


FIGURE 1

THIS TRACING shows a complete A-V block with a ventricular rate of 30 and atrial rate of 100. Please note the displacement of P-Ta segment.

X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

Alveolar Proteinosis

*ERICH K. LANG, M.D.**
WILLIAM M. ANSHUTZ, M.D.†
Indianapolis

A 32-YEAR-OLD white female patient was admitted with a six month history of "recurrent pneumonia." She had received intermittent antibiotic therapy, ranging from penicillin to several brands of broad spectum antibiotics. Interval improvement usually followed a course of antibiotic therapy. Review of multiple chest roentgenograms over the past six months revealed increasing infiltrates involving the left lower lobe, the right lower lobe and the left perihilar area. Interval improvements were noted on multiple of these films, however, there was never complete resolution of the infiltrative process.

The admission roentgenogram revealed a rather homogeneous infiltrate involving the left lower lobe, the left perihilar area, and segments of the right lower lobe. The lingular segment and middle lobe appeared to be clear. Air bronchogram was demonstrated in the left lower lobe. The dense parenchymal infiltrate of alveolar type strongly suggested the possible diagnosis of alveolar proteinosis. The diagnosis was subsequently confirmed by lung biopsy.

Over the next 18 months, the patient was followed and hospitalized at decreasing intervals. Serial chest roentgenograms showed an essentially progressive nature of infiltration, although occasionally, a regression of the infiltrates over a period of two or three months appeared to be demonstrated. Antibiotic therapy, cortisone administration in large dosages, and enzyme therapy of the proteolytic type failed to significantly alter the course. In several instances, the patient had to be placed in an oxygen tent and even positive pressure by means of a Bennett respirator had to be applied.

Alveolar proteinosis has been recognized as a distinct entity only in the last five years. The disease was originally considered rapidly progressive and fatal. However, a review of the most recent literature reveals that with increasing frequency, cases are followed over a period of years, and appear to be only slowly progressive, or even stationary in nature. A classical roentgenologic appearance and particularly the classical course of this disease entity, make diagnosis possible.

Chest roentgenograms are distinguished by dense infiltrates involving one or multiple segments of the lung. The alveoli appear to be filled with a thick exudate. This frequently gives a roentgenologic sign of air bronchograms due to the fact that the air-filled bronchi will contrast against the almost homogeneously opacified alveoli. A long lasting stationary appearance of these infiltrates without any significant change or

* Acting Director of Radiology, Methodist Hospital, Indianapolis.

† From the Radiology Department, Methodist Hospital, Indianapolis.

influence by antibiotic therapy is felt to be quite characteristic.

The clinical course is usually characterized by a slow but definite deterioration of the patient's condition. Superimposed bronchopneumonitidies may be cleared up by antibiotic therapy and may simulate improvement. In many cases, however, a stationary condition appears to be reached with the only residual limitation of a decreased vital capacity and decreased pulmonary function test ability. The etiology of this disease is not known, although viral entities have been incriminated.

Editor's Note

Abstracts of any interesting cases for publication for the Radiology Page will be accepted. Please submit the abstract with one glossy print of the roentgenogram and the text portion not exceeding 35 typewritten lines to E. K. Lang, M.D., X-Ray Department, Methodist Hospital, Indianapolis, Indiana.

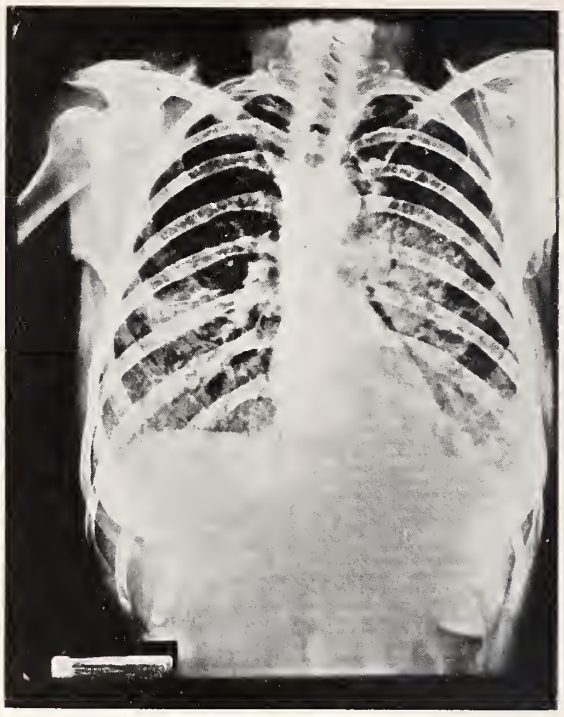


FIGURE 1

FILM STUDY showing wide distribution of the alveolar exudate.

"The Drug That Wasn't There"

Obviously we must make the investigation of new drugs as safe as possible. At the same time, we must not hamstring the medical research which alone can produce new curative agents for the future, and trials in humans are an essential part of the research process.

It should be remembered that the "miracle drugs" produced by the pharmaceutical industry do, in fact, deserve this name and have played a major part toward increasing our life span by ten years in less than a generation. In the years to come "the drug that wasn't there" may bring greater tragedy than the drug which possesses unexpected toxicity.—Editorial in *Cincinnati Journal of Medicine*, November, 1962.

The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

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"Look-Alikes" and "Sound-Alikes"

DRUGS AND DRUG PRODUCTS which look alike in writing or sound alike over the phone have always been a possible source for error. With the rapid increase in new drug names and the introduction of more active and more potent drugs, the necessity for care in prescribing, for better penmanship, and for more careful pronunciation becomes more important than ever.

Dr. Edward Rowe, professor of pharmacy at Butler University, in an article with the above caption, points out to practicing pharmacists through *The Indiana Pharmacist* the advisability of eternal vigilance in relation to the "look-alike" and "sound-alike" problem. His remarks are addressed to pharmacists, but for the exception that some of the details do not apply to physicians, all the principles of his discourse and some of the details are applicable to physicians as well as pharmacists.

The legal and moral responsibility for the proper dispensing of medicine is a joint responsibility shared by the physician and the pharmacist. In a world in which, despite the utmost care, error occasionally occurs, and in a transaction such as the filling of a prescription where the consequences may be so serious, no amount of care could be considered extravagant.

Dr. Rowe reproduces a partial list of "look-alike" and "sound-alike" drugs from an article in *Drug Topics* by Frederick D. Lascoff, as follows:

Meratran	Metreton
Digoxin	Digitoxin
Proception	Preceptin
Nitroglycerin	Nitrogyln
Desoxyn	Digoxin
Hyadrine	Hydergine
Folbesyn	Fulvicin
Niacin	Niamid
Felsol	Feosol
Novatrin	Novaldin
Choledyl	Cholomodin
Quinine	Quinidine
Glaucon	Glukor
Calamine	Calomel
Uromide	Uremide
Hypotan	Hyptran
Orinase	Ornade
Alkalol	Alcohol
Butabell	Butibel
Apresoline	Priscoline
Demerol	Dicumarol
Elavil	Elevites

In addition to the above types of similarity, there are those products which have differentiating letters such as M or N appended to them to denote differing forms, or have numbers added to denote different strengths. Dr. Rowe recommends that the differentiating letter or number be used as a prefix instead of a suffix in order to emphasize the feature more clearly.

He also urges the prescriber to specify the name of the manufacturer whenever possible so that this information will aid in identifying the proper product.

Dr. Rowe also makes the suggestion that manufacturers use labels of contrasting colors on products with similar names, and that pharmacists separate drug products with similar names and shelve them away from each other.

Physicians should ever be reminded to write legibly, to speak carefully over the phone, to listen attentively while the phoned prescription is repeated by the pharmacist, and to be properly impressed with the danger which is inherent in the above listed array of "look-alikes" and "sound-alikes."

Arthritics Exploited by Health Quackery

THE ENORMITY of health quackery as applied to arthritis sufferers was highlighted recently by testimony before the Senate Committee on Aging. Officials of the Arthritis and Rheumatism Foundation provided facts which indicate that victims of arthritis are the most extensively exploited patients in the United States.

At least $250,000,000 is extracted each year from arthritic individuals by the promoters of fraudulent and misrepresented products. The foundation is actively engaged in removing these pseudo-cures from the market. Anyone who knows of any suspicious remedies for arthritis should report them to the foundation or to one of its chapters.

Liefcort, a dangerous mixture of hormones produced in Canada, was publicized as a cure for arthritis in this country by a magazine article. Its importation into the United States was immediately prohibited, but many people went to Canada to obtain the drug. At least three persons are dead as a result of this fraudulent medicine.

The durability of the racket is illustrated by the testimony of Dr. Russell Cecil who recalled that his mother bought a $35 device in 1894 for her arthritis. The same useless contraption was still being sold as late as 1958.

The effrontery of quacks is illustrated by the experience of the executive director of the foundation's Illinois chapter, Jerry J. Walsh, himself a victim of arthritis for 22 years. He testified to the utter uselessness of many treatments of quackish nature which he had tried on an impulse to try anything once. After his appearance before the committee he was flooded with literature advertising a host of "cures."

Dr. Ronald W. Lamont-Havers, national medical director of the foundation says that their program consists of "fighting frauds with facts." The foundation's three goals are: "To educate the general public about the dangers of misrepresented products, to support all efforts to keep them off the market, and to direct arthritis sufferers to proper medical care."

The foundation also supports programs of research, patient care and professional education. Its national headquarters are at 10 Columbus Circle, New York 19.

Postman May Be Delivering Death

SEVERAL CHILDREN have been poisoned and one has lost her life from the accidental ingestion of drugs obtained by children in one way or another from the mails. The Post Office Department and the Food and Drug Administration have issued a joint warning.

Strychnine pills addressed to a neighbor were taken from a shared rural mailbox by a mother for the purpose of keeping the

medication safe until the neighbor returned from a trip. Two children ate some of the tablets while the mother was away on an errand; one died.

FDA has conducted a national poll and found that while there have been no known deaths in other incidents, there has been a number of untoward happenings in regard to drugs in the mail which might have proved fatal for children.

In one instance a free sample of bleach containing 12% chlorine was too large for the mailbox and was left on the doorstep by the postman. No mishap occurred but the household was sufficiently aroused to seek a method of avoiding such danger. Some children have access to the mailbox and may obtain dangerous packages even when they are properly delivered. All packages for mailing drugs and hazardous chemicals should have "tamper-proof" stoppers to protect children.

In another case an 11-year-old boy, mistaken for a medical doctor by the same name, was placed on a medical mailing list. The boy secreted the drugs and took some of them from time to time. While under the influence of the drugs he committed many delinquent acts.

A drug mailed to the home of a professor of medicine was picked up by one of the neighbor's children who swallowed several of the tablets. The child became unconscious and had to be hospitalized.

One report mentioned several instances in which children had opened samples of medicine which had been in the mail. There have also been reports of children obtaining dangerous drugs from city dumps and trash cans to which the samples have been consigned in their original containers. Discarded drugs should be removed from their containers and flushed down the drain or burned.

Safety campaigns should stress the safety rules for drugs in the mail as well as repeatedly warning parents of the necessity of safeguarding drugs and poisons in the home.

Guest Editorials

"See You in Atlantic City"

GEORGE M. FISTER, M.D.
President, American Medical Association

THE AMERICAN MEDICAL Association will hold its 112th annual meeting June 16-20 at Atlantic City. In urging you to attend, I would like to write briefly about an aspect of science that is rapidly becoming a very serious problem. I refer to what scientists have called "The Publication Explosion."

Research men are faced with the dictum of "publish or perish." Naturally, they publish. They publish so much that some areas of science now have such a volume of literature that it is often cheaper and faster to repeat an experiment than to search the literature and find out what others have done in the same field.

It has been said that it would be necessary for a physician to read one book an hour just to keep up with new findings in his own specialty. This obviously is impossible.

There were four million scientific documents published in 1962. These included some three million papers and articles in some seventy thousand technical and professional journals. The bulk of these are in the life sciences, particularly medicine. They are published in at least 65 different languages, in almost every country of consequence in the world.

Faced with this overwhelming deluge of paper, the physician in practice, already one of the busiest men in his community, may be inclined to just throw up his hands.

The scientific meeting helps greatly to fill the gap and to help the physician keep abreast of new developments. At the AMA annual meeting, in a short space of four

or five days the physician has his choice of literally hundreds of scientific papers covering the broad spectrum of medicine. He can select half a dozen lectures daily from the program as a whole. Or he can concentrate on his specialty section and its meetings.

The physician can select outstanding medical motion pictures, fresh from the production line. Or he can view live telecasts of surgery and medicine in action in new areas.

It would take years of reading an hour a day to learn all that can be learned in five days at the annual meeting of the American Medical Association. The scientific exhibits alone are a good postgraduate course in medicine.

All of us as physicians are well aware of the problems of keeping abreast, of bringing the findings of the researchers into our practice as soon as possible. Through the annual meeting of our national association, we can make considerable progress in this important respect.

As president of the American Medical Association, I personally urge every American physician to make plans now to attend this annual meeting June 16-20 in Atlantic City.

Folic Acid Deficiency

STEVENSON AND MARTIN discuss megaloblastic change in the bone marrow in the course of hereditary spherocytosis elsewhere in this issue. We have recently seen such a case which further illustrates the same mechanism. Our patient was a 20-year-old single colored female, with a previously diagnosed sickle cell anemia. Her admission complaints were tiredness, weakness and leg ulcers. Her history indicated two previous hospitalizations for sickle cell anemia. The leg ulcer on this admission was quite large, measuring 6 x 4 cm. and was on the anterior medial aspect of the lower left leg.

She had been referred into the hospital by her physician because of a hemoglobin of 3 gms. On physical examination, the patient presented pallor, an evident acute illness and the leg ulcers mentioned above. Laboratory work indicated a hemoglobin of 4.2 gms., hematocrit reading of 10% and an erythrocyte count of 730,000. Her white count was 12,456 with a normal differential. Over 400 nucleated red cells were seen per 100 white cells. The erythrocytes present showed marked anisocytosis and poikilocytosis along with marked polychromasia and basophilic stippling. It was noted that some of the nucleated red cells in the peripheral blood appeared megaloblastic in type. The Diagnex test was positive for free hydrochloric acid in the stomach. Serum iron was 46 micrograms.

Bone marrow obtained the day after admission showed marked megaloblastic hyperplasia. Sickling test was positive and electrophoresis revealed SS hemoglobin. Because of the megaloblastic marrow the patient was placed on folic acid, 5 mgs. three times daily. Her response to this therapy was quite prompt with an elevation of the reticulocyte count to 25% within one week. It was noted that as the reticulocyte count rose, the nucleated reds began to disappear from the peripheral blood. At the end of 17 days, only 4 nucleated reds remained per 100 white cells. At this time the patient's hemoglobin was 7 gms. with a hematocrit of 23 and an erythrocyte count of 2,380,000. Since this was approximately the optimal level that she would carry with a sickle cell anemia and because the reticulocyte count was decreasing, the patient was released.

The mechanism of increased demands for folic acid in chronic hemolytic anemias, producing a folic acid deficiency, is also evident in this case.

Paul V. Evans, M.D.
Indianapolis

Editorial Notes . . .

JESSI (Junior Engineers' and Scientists' Summer Institute) will be conducted this summer at two locations from June 16 to 29 for the orientation of interested junior and senior high school students. DePauw University will be holding its fifth such

session. Previously DePauw has been co-educational, but this year will be host to girls only. Indiana boys will attend a similar institute at Michigan State University. The two weeks contains 58 classroom hours of vocational information on the common biological sciences, the physical sciences, mathematics, nuclear measurements and specialized fields including medicine and pharmacy.

The Veterans Administration is extending the use of a new concept in the hospital treatment of psychiatric patients. Called the Unit System, the new method maintains a patient in the same patient group with the same doctors, nurses, social service workers and therapists throughout the hospital stay. This is in contrast to standard procedure which changes a patient from an admission service to treatment ward, later to special treatment services if needed and then to advanced wards prior to going home. The Unit System has been tried in a few hospitals and has resulted in patients making better progress in the hospital and has produced fewer readmissions. The VA Hospital at Marion, Indiana is one of those adopting the new system.

Writing is for reading and if it cannot be read, it is worse than useless. Herman Feldman, Ph.D., research director of Methodist Hospital in Gary has researched the writing on patients' charts and found at least some of it to be less than satisfactory. He calculated that the time involved in deciphering the 40% of orders found to be illegible cost about $12,000 annually—quite a bundle! Since poor handwriting also introduces the hazard of medication and treatment errors the cost of sloppy writing is considerable. Dr. Feldman reported on his study in *Hospitals,* and recommended that all writing in hospitals be done while sitting down and with less haste.

The Mississippi State Medical Journal reports that the California Medical Association recently asked an IBM machine to arbitrate the debate between voluntary prepayment and King-Anderson type medical care. Data on California's over-65 citizens, together with the tax increase to finance King-Anderson, the cost of Blue Cross-Blue Shield, and the benefits of each were programmed into the machine. The button was pushed and the answer came out: Voluntary coverage is $17 million per year cheaper than K-A and gives greater benefits.

The advantages of prescribing drugs by brand names rather than by generic names were highlighted recently by the discovery of a lot of digoxin tablets of such low potency as to be useless. While the maker of the tablets could be identified, the tablets bore no brand name and were marketed under the generic name. Also recently, a diabetic patient requested permission from a pharmacist and his physician to have his prescription for a brand name form of tolbutamide filled with a cheaper product which is sold under the generic name. When the patient ended up in the hospital, analysis showed that the "generic" tablets contained the proper amount of the drug, but that they did not dissolve in the gastrointestinal tract.

Automobile seat belts protect life and prevent injury only when they are worn properly. The *JAMA* reports the case of a short stocky woman who wore her belt fastened loosely across her upper abdomen. She was injured internally in a collision. The belt should be placed snugly over the bony structures of the hip and pelvis with the buckle in the center. This belt position confers the greatest amount of protection and involves the least liability of damage locally. Pregnant women may wear seat belts properly positioned and incur no danger of injury to the pregnant uterus as a result of the belt.

Dr. H. J. Roberts has reported in the American Heart Journal on the advantages of Metrecal as a dietary in the treatment of heart patients with edema. The constancy of its constituents provided precise nutritional control not possible with an ordinary

diet. Dr. Roberts recommended Metrecal whenever a low sodium, low fat, low fluid diet with adequate protein and carbohydrate intake was desired.

Children with deficient eyesight, even to a marked degree, may often go many years without detection. Unrecognized visual deficiencies may result in poor schoolwork. "Parents' Guide to Children's Vision" is the subject of a 20-page booklet published by the Public Affairs Committee. It is written especially to alert parents to the importance of good eyesight, and to acquaint them with the telltale signs and symptoms of visual deficiency in children. The pamphlet sells for 25 cents a copy and for considerably less in quantities. It may be obtained by addressing the committee at 22 E. 38th St., New York 16. ◄

About Our Cover

One of the major fields in medical research is directed toward solving the enigma of cancer . . . true, we have increasingly effective methods of diagnosing the malignancies, and continuingly more successful means of treating them when detected—surgery, radiation treatment and now, chemotherapy have given new hope to those stricken. But still the mystery of why these malignant cells develop and proliferate remains unsolved.

The detective work necessary to solve this mystery takes dedication, skill and patience; it also takes money. Funds have been raised and continue to be raised in many different ways. One fund raising method has been through the sale of regular, semi-postal or postal tax issues of stamps.

Forty-six countries in the last 35 years have issued postage stamps to aid in this fight against cancer.

Sweden was the first country to issue a "cancer stamp." This stamp, which appeared in 1928, commemorated the 70th birthday of King Gustav V. Sale of these stamps raised more than $42,000 for cancer research.

The Danish Cancer Committee receives about $75,000 annually from the sale of luxury telegram forms, with 24 different designs to choose from. These forms are used for greeting purposes—birthdays, anniversaries, etc. They are issued by the postal administration which is also responsible for the telegram service in that country.

The very last postage stamp to be issued in Danzig in 1939, before that small country was occupied by Germany, was a stamp honoring Wilhelm Rontgen, imprinted "Fight Cancer, Cancer is Curable."

Ecuador issued a stamp that was obligatory on all mail for a ten day period back in 1938. However, economy played a rather surprising part in this issue . . . the stamp used had appeared originally in 1929 to promote the use of tobacco. It was then re-issued, overprinted with the slogan "The Campaign Against Cancer." Their intentions were certainly praiseworthy and it must be admitted that 25 years ago the close relationship between smoking and lung cancer was a factor not fully realized at that time.

To commemorate the 40th anniversary of Pierre and Marie Curie's discovery of radium, 21 countries associated with France, also Cuba, Monaco and Afganistan, issued special stamps. The surtax from this semi-postal issue was donated to the International Union for the Control of Cancer.

A collection of these "cancer stamps" can be completed at modest cost. Collectors may obtain a free list of stamps as listed in the Scott and Minkus catalogs by sending a stamped, self-addressed envelope to Marvin Taub, Production Manager, American Cancer Society, 521 West 57th Street, New York 19.

The Journal would like to thank the American Cancer Society for making this month's cover picture available.—M.E.R.

President's Page

MENTAL HEALTH

A short time ago a small news item caught my eye. It was headed "AMA Favors JFK Mental Health Plan." The article reported that the Kennedy Mental Health Program, announced Feb. 5, 1963, agrees with basic recommendations made by the AMA last summer. Both programs stress comprehensive care of mental patients at the community level rather than in big, distant state institutions.



Mental illness is America's most pressing and complex health problem. In 1955, by act of Congress, the Joint Commission for Mental Health was formed, headed by Dr. Leo H. Bartemeier, of the AMA Council on Mental Health. A report from this commission, "Action for Mental Health in 1961" stimulated the AMA to hold the First National Congress on Mental Health October 4-6, 1962, with physicians, governmental and state mental health officers, members of allied professions, representatives from voluntary health organizations and interested lay persons participating. The purpose of this congress was to provide a setting where physicians and other interested parties could discuss and organize effective, regional programs. The AMA plans to be more active in encouraging physicians to become leaders in community planning for mental health and to effectively channel physician participation in mental health activities.

The First Annual Indiana Congress on Mental Health, sponsored by the Indiana State Medical Association, and arranged and organized by the joint Mental Health Steering Committee of the ISMA, was held February 20, 1963, and was well attended by representatives from county medical societies, members of county and state Mental Health Associations, and members of the Indiana Branch of the American Psychiatric Association. An excellent program was headed by Dr. Edward R. Annis, President-Elect, AMA, who reported on AMA objectives, planning and implementation of programs.

The Honorable Matthew E. Welsh, Governor, reported on the responsibilities of the state government and the need for additional funds. Dr. Stewart Ginsberg, Indiana Commissioner of Mental Health, reported on "Mental Health in Indiana." Dr. Norman Booher spoke on "Coordination of Community Services" and Dr. Paul E. Burns spoke on "Help Available from the Mental Health Association." Dr. Harry Pandolfo spoke about "Significance of Community Surveys." "Insurance Aspects" was the topic discussed by Dr. Perry C. Talkington, Dallas, Texas, member of the American Psychiatric Association Commission on Insurance. The program was well received and the audience participated in a lively question and answer period conducted by the chairman, Dr. Glen Ward Lee.

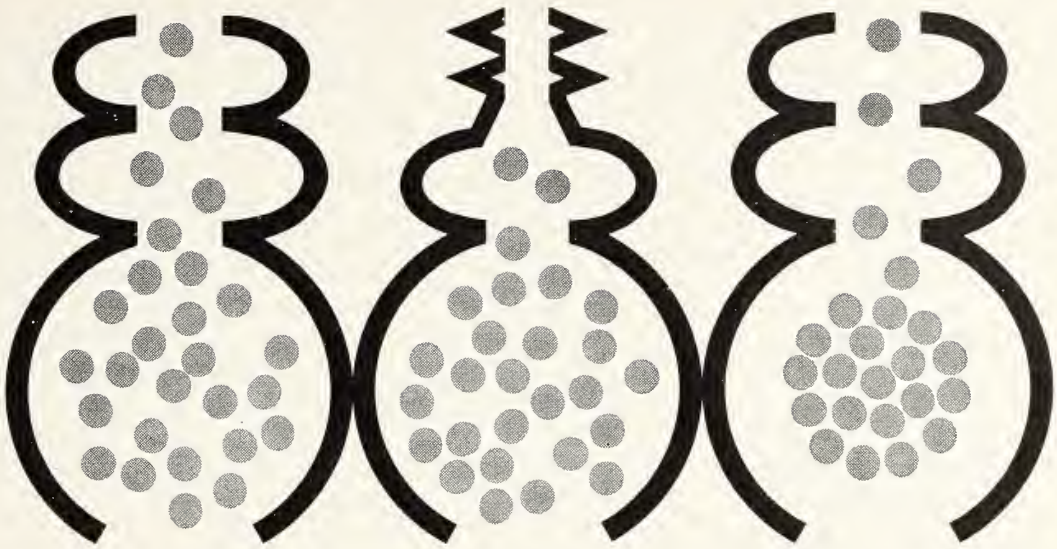
It was pointed out that "there is a real eagerness on the part of citizens and professional workers throughout the country to take action in support of services in support of mental health. This interest and concern is evident not only in major centers and among national leaders, but also to a surprising degree in smaller communities with relatively few resources. Local community leaders are hungry for advice and help on what to do and how to do it. The interest runs all the way from how to conduct local studies, to advice on what kind of mental health service and programs to establish."

We practicing physicians, as the first to care for patients with mental illness, and as responsible citizens in our communities, must give the effective, dynamic leadership that is needed and must also fully cooperate with allied disciplines and responsible lay groups.

It appears that the major activities of this association will be in stimulating county medical societies to make suitable surveys of the mental health needs of their communities; aid in planning effective programs at the community level; continuing education of the practicing physician in the field of mental and emotional disturbances; improving education in this field at the undergraduate and house officer level and exploring sources for additional funds at all levels (i.e., fees paid by recipient, community contributions, tax support from local, state and federal sources) and encouraging wider coverage through prepaid medical insurance programs.

A series of regional meetings throughout the state is being planned and we urge county medical societies and individual physicians to participate, and to activate the programs so vitally needed.

Maurice E. Stocke



lowers motility | relieves cramping | stops diarrhea

LOMOTIL® Antidiarrheal tablets and liquid

(brand of diphenoxylate hydrochloride with atropine sulfate)

Traditionally the most effective means of slowing excess intestinal motility in diarrhea and so of relieving the disorder have been the opium derivatives. Now Lomotil makes available an antidiarrheal agent[1] of greater therapeutic efficiency than morphine.

By controlling hypermotility, the basic mechanical dysfunction of diarrhea, Lomotil reduces the frequency and fluidity of stools, diminishes cramping and controls diarrhea in many patients in whom other drugs have proved inadequate.

In a recent clinical report Cayer and Sohmer[2] state: "The alleviation of symptoms [with Lomotil] was usually prompt, occurring within 24 to 72 hours even in the long-standing chronic cases. . . . A surprisingly satisfactory response was obtained in 75 per cent of the patients with regional enteritis and in 63 per cent of those with ulcerative colitis, all of whom had failed to respond to other measures."

The high therapeutic efficiency of Lomotil, its safety, convenience and economy may be used to advantage in acute or chronic diarrhea.

Dosage: For *adults* the recommended initial dosage is two tablets (2.5 mg. each) three or four times daily. Maintenance dosage may be as low as two tablets daily.

Lomotil is supplied as unscored, uncoated white tablets of 2.5 mg. and as liquid containing 2.5 mg. in each 5 cc. A subtherapeutic amount of atropine sulfate (0.025 mg.) is added to each tablet and each 5 cc. of the liquid to discourage deliberate overdosage. Recommended dosage schedules should not be exceeded.

Note: Lomotil is an exempt preparation under Federal narcotic statutes.

Detailed information and directions for use in children and adults are available in Physicians' Product Brochure No. 81. G. D. Searle & Co., P. O. Box 5110, Chicago 80, Illinois.

1. Janssen, P. A. J., and Jageneau, A. H.: A New Series of Potent Analgesics: Dextro 2:2-Diphenyl-3-Methyl-4-Morpholino-Butyrylpyrrolidine and Related Amides. I. Chemical Structure and Pharmacological Activity, J. Pharm. Pharmacol. 9:381-400 (June) 1957.
2. Cayer, D., and Sohmer, M. F.: Long-Term Clinical Studies with a New Constipating Drug, Diphenoxylate Hydrochloride, N. Carolina Med. J. 22:600-604 (Dec.) 1961.

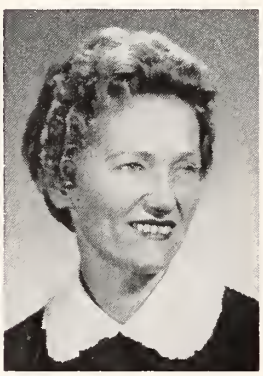
G. D. SEARLE & CO. *Research in the Service of Medicine*

The Woman's Auxiliary

REPORTS TO ISMA

How rapidly a year rolls by. I have but a few more weeks in office, and this will be my last report to you. I do hope that I have been able to convey to you some of the important activities of the auxiliary.

Our county reports are just now coming in. It is on the county level that every phase of auxiliary work is really carried out. Even when you ask for help from the state level in legislative matters, those personal wires and letters come from individuals in the counties. I might say that the response was excellent to both of the recent appeals when Senate bill 132 was up for vote. The bill did pass both houses of the Legislature but was vetoed by the Governor. Whether or not it comes up again in the special session remains to be seen.



The auxiliary is justly proud of its part in the field of Health Careers. Local auxiliaries this year started three new Future Nurses Clubs, still sponsor some 28, reaching approximately 1,400 high school students and to date I have reports of 25 nursing scholarships and 13 loans totaling nearly $10,000.00.

We have collected over $10,000.00 for AMA-ERF to date and my report is incomplete.

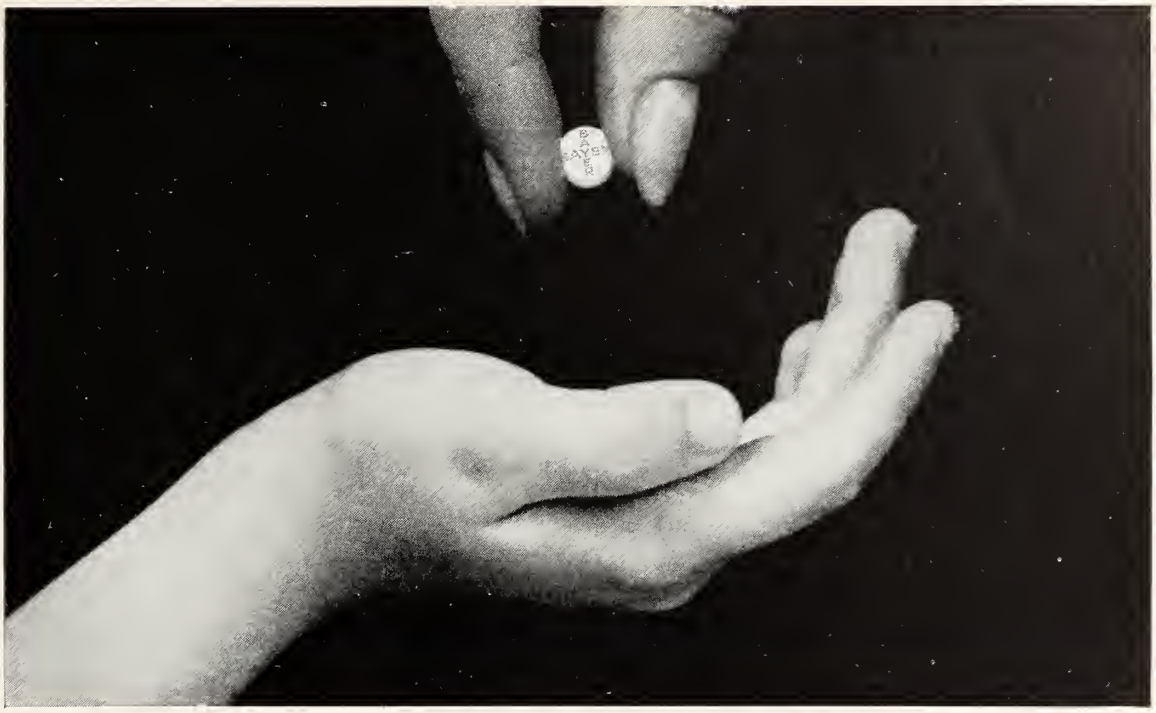
We are bursting with pride in our I.H.A. participation, the collection of sample drugs and medical discards for medical missions.

I have enjoyed this year. It has been a busy one, but the personal contacts have been invaluable. I am proud of the auxiliary, proud of the county units and the work they are doing.

We shall be convening soon for our 19th annual House of Delegates. Urge the women in your county to attend. I know that you of the ISMA will give to the new leadership soon to be elected, the same splendid support and cooperation that I have enjoyed this year.

With deepest appreciation to the ISMA Executive Committee, to the office personnel at 3935 N. Meridian, and to the Journal staff, I say a million thanks.

Mary Johnson



HOW TO BE SURE
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The answer is Orange Flavored Bayer Aspirin for Children

The dosage is 1¼ grains per tablet. Mothers place such confidence in the Bayer name. And the new orange flavor is so fresh and smooth that children take it readily. (The grip-tight cap on the bottle helps keep them from taking it on their own.)

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Medical Certification and Statistical Assignment of Cause of Death

ROBERT A. CALHOUN, P.E.D.*
PAULINE McCAGUE†
L. W. SPOLYAR, M.D.‡
Indianapolis

THE IMPORTANCE of death certification has long been recognized both for its legal and its public health significance. From the latter point of view, certification of cause of death is especially important in:

1. Determining the incidence of certain causes of death.
2. Planning the control of certain diseases.
3. Investigating causes of fatal accidents.
4. Establishing the need for health programs.
5. Measuring the effectiveness of health programs.

In recent years there has been much discussion concerning the statistical analysis of cause of death, and there have been two major areas in which the physician and the statistician have not appeared to be in agreement.

The first area involves the present general practice of assigning a death to only one underlying cause. Many physicians feel that frequently death is due to no one single cause, but that a number of conditions are equally responsible. Thus there is an apparent need for a "multiple cause" approach to reporting and analysis. However, until such time as an effective international system can be worked out, this type of reporting and analysis would create more problems than it would solve. Certainly it is not feasible for individual states to attempt to resolve this problem.

This discussion is concerned primarily with the second of these areas—the physician's concern that the statistician may be second guessing him in assigning the cause of death.

Actually, the World Health Organization and the U. S. National Office of Vital Statistics have taken a number of steps to insure that the cause of death used in statistical analysis is, in the opinion of the certifying physician, the one responsible for death. The design of the death certificate is such that little is left to the judgment of the statistician if the physician follows the recommendations of these agencies.

In 1948, members of the World Health Organization agreed that the cause of death to be tabulated should be the *underlying cause*, defined as "(a) the disease or injury which initiated the train of morbid events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury."** At the same time the group designed the International Form of Medical Certificate of Cause of Death to incorporate this concept. This form and the Medical Certification section from the Indiana Death Certificate are shown in Figures 1 and 2.

* Director, Public Health Statistics, Indiana State Board of Health.
† Nosologist, Division of Public Health Statistics, Indiana State Board of Health.
‡ Director, Bureau of Preventive Medicine, Indiana State Board of Health.

** World Health Organization, *Medical Certification of Cause of Death*, Geneva, Switzerland, 1952, p. 5.

INTERNATIONAL FORM OF MEDICAL CERTIFICATE OF CAUSE OF DEATH

FIGURE 1

CAUSE OF DEATH		Approximate interval between onset and death
I		
Disease or condition directly leading to death *	(*a*) due to (or as a consequence of)	
Antecedent causes Morbid conditions, if any, giving rise to the above cause, stating the underlying condition last	(*b*) due to (or as a consequence of)	
	(*c*)	
II		
Other significant conditions contributing to the death, but not related to the disease or condition causing it		
		

* This does not mean the mode of dying, e.g., heart failure, asthenia, etc. It means the disease, injury, or complication which caused death.

MEDICAL CERTIFICATION

18. **CAUSE OF DEATH** [Enter only one cause per line for (a), (b), and (c).] — INTERVAL BETWEEN ONSET AND DEATH

PART I. DEATH WAS CAUSED BY:

IMMEDIATE CAUSE (a)_____

Conditions, if any, which gave rise to above cause (a) stating the underlying cause last. — DUE TO (b)_____

DUE TO (c)_____

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a). — 19. WAS AUTOPSY PERFORMED? YES ☐ NO ☐

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐ — 20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)

20c. TIME OF INJURY Hour a.m. p.m. Month Day Year

20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐ — 20e. PLACE OF INJURY (e.g., in or about home, farm, factory, street, office bldg., etc.) — 20f. CITY, TOWN, OR LOCATION COUNTY STATE

FIGURE 2

MEDICAL CERTIFICATION SECTION—INDIANA DEATH CERTIFICATE

Physician's Diagnosis of Specific Cause

This revision, which went into effect in 1949, was actually a major step forward in that it specifically provided that the cause of death tabulated should be the underlying cause designated by the attending physician. Up to that time, cause of death was assigned largely on the basis of a priority table developed by the U. S. Bureau of the Census, with the result that the assigned cause might, or might not, be that which the attending physician felt was the underlying one. For example, if diabetes and heart disease were mentioned on a certificate, the death would be assigned (with certain minor exceptions) to diabetes, with no attempt made to ascertain the intent of the certifying physician.

Such priority tables are no longer used and under present practice the State Board of Health makes every effort to assign a death to the underlying cause as reported by the attending physician. In the event there is some uncertainty, a letter of inquiry is sent to the physician, not to question his judgment, but rather to be sure that the death is assigned to the cause which the physician intended.

The cause of death section of the certificate is designed to be completed as follows:

Part I gives the disease or condition leading directly to the death, followed by the antecedent causes, with the underlying cause last in sequence.

Part II gives other significant conditions which contributed somewhat to the death, but were not in the causal sequence of events noted in Part I. *(In no case should the underlying cause be given in this section.)*

When there is only one disease or condition involved in the death, the section is simple to fill out with the cause of death solely noted on Line 18—Part Ia. When several conditions are involved, the job of completing and interpreting the section becomes more difficult. The following explanations may be helpful in completing Part I:

Ia should give the condition which the physician considered to be the direct cause of death (*not* the mode of dying—e.g., heart failure, respiratory failure—which should not be stated at all since it is no more than a synonym for the fact that death occurred and provides no useful information). Insert here the disease, injury or complication which directly preceded death. It may be the sole entry or it may be a complication such as peritonitis, toxemia or septicemia. Next consider whether the direct cause reported resulted as a normal consequence of any prior disease or injury.

If such is the case then the antecedent disease or injury would be listed under Ib. Always make certain that the listed direct cause of death was "due to" or "as a consequence of" the antecedent disease or injury noted under Ib.

Further, consider whether there was any other disease or injury that existed prior to the disease or injury listed in Ib that served as the "starting point" for the events that led to the situation listed in Ib, and finally to the direct cause of death. Enter this antecedent disease or injury under Ic.

Through this process Item Ic becomes the starting point of the entire sequence leading to the direct cause of death and each noted item is in logical progression in point of time and etiology. Item Ic thus becomes the *underlying cause of death* and is the one used for statistical purposes as the official cause.

The following are some actual examples of certifications completed according to the procedure discussed and giving a clear expression of the cause of death:

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

		INTERVAL BETWEEN ONSET AND DEATH
PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a)	CONGESTIVE HEART FAILURE	2 HOURS
Conditions, if any, which gave rise to above cause (a) stating the underlying cause last. DUE TO (b)	ARTERIOSCLEROTIC HEART DISEASE	UNDETERMINED
DUE TO (c)		

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a). 19. WAS AUTOPSY PERFORMED? YES ☐ NO ☒

PULMONARY TUBERCULOSIS

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐ | 20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)

20c. TIME OF INJURY Hour a. m. p. m. Month Day Year

20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐ | 20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.) | 20f. CITY, TOWN, OR LOCATION COUNTY STATE

ASSIGNED TO: Arteriosclerotic heart disease

CORONER'S CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a) SIMPLE FRACTURE OF THE RIGHT TEMPORAL — INTERVAL BETWEEN ONSET AND DEATH: 5 MIN.

Conditions, if any, which gave rise to above cause (a), stating the underlying cause last. DUE TO (b) FALL DOWN STEPS

DUE TO (c)

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a). 19. WAS AUTOPSY PERFORMED? YES [X] NO []

20a. ACCIDENT [X] SUICIDE [] HOMICIDE []

20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.) FALL DOWN THE BASEMENT STEPS

20c. TIME OF INJURY Hour ~~a.m.~~ p.m. 8:20 — Month Day Year 12-21-1960

20d. INJURY OCCURRED WHILE AT WORK [] NOT WHILE AT WORK [X]

20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.) HOME

20f. CITY, TOWN, OR LOCATION — COUNTY DUBOIS — STATE INDIANA

ASSIGNED TO: Fall down steps

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a) CORONARY THROMBOSIS — INTERVAL BETWEEN ONSET AND DEATH: 15 MIN.

Conditions, if any, which gave rise to above cause (a) stating the underlying cause last. DUE TO (b)

DUE TO (c)

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a). ARRESTED TUBERCULOSIS, 1930 — 19. WAS AUTOPSY PERFORMED? YES [] NO [X]

20a. ACCIDENT [] SUICIDE [] HOMICIDE []

20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)

20c. TIME OF INJURY Hour a.m. p.m. — Month Day Year

20d. INJURY OCCURRED WHILE AT WORK [] NOT WHILE AT WORK []

20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.)

20f. CITY, TOWN, OR LOCATION — COUNTY — STATE

ASSIGNED TO: Coronary thrombosis

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a) ACUTE PULMONARY EDEMA — INTERVAL BETWEEN ONSET AND DEATH: 6 HOURS

Conditions, if any, which gave rise to above cause (a) stating the underlying cause last. DUE TO (b) METASTATIC CARCINOMA OF LIVER, SPINE, ABDOMEN — 8 MONTHS

DUE TO (c) PRIMARY CARCINOMA OF STOMACH — 1 YEAR

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a). CHRONIC NEPHRITIS — 19. WAS AUTOPSY PERFORMED? YES [] NO [X]

20a. ACCIDENT [] SUICIDE [] HOMICIDE []

20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)

20c. TIME OF INJURY Hour a.m. p.m. — Month Day Year

20d. INJURY OCCURRED WHILE AT WORK [] NOT WHILE AT WORK []

20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.)

20f. CITY, TOWN, OR LOCATION — COUNTY — STATE

ASSIGNED TO: Primary carcinoma of stomach

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a) PULMONARY EMBOLUS — INTERVAL BETWEEN ONSET AND DEATH: 2 HOURS

Conditions, if any, which gave rise to above cause (a) stating the underlying cause last. DUE TO (b) COR PULMONALE — ? YEARS

DUE TO (c) PULMONARY FIBROSIS — ? YEARS

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a). DIABETES MELLITUS — 19. WAS AUTOPSY PERFORMED? YES [] NO [X]

20a. ACCIDENT [] SUICIDE [] HOMICIDE []

20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)

20c. TIME OF INJURY Hour a.m. p.m. — Month Day Year

20d. INJURY OCCURRED WHILE AT WORK [] NOT WHILE AT WORK []

20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.)

20f. CITY, TOWN, OR LOCATION — COUNTY — STATE

ASSIGNED TO: Pulmonary fibrosis

In the actual certifications appearing below various portions of the suggested procedures were not followed. In these cases it was necessary to query the attending physician to determine the proper assignment of cause of death.

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

PART I. DEATH WAS CAUSED BY:
IMMEDIATE CAUSE (a) CARCINOMA COLON — INTERVAL BETWEEN ONSET AND DEATH: 3 YEARS

Conditions, if any, which gave rise to above cause (a) stating the underlying cause last.
DUE TO (b) DIABETES MELLITUS — 4 YEARS
DUE TO (c)

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a). — 19. WAS AUTOPSY PERFORMED? YES ☐ NO ☒

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐ — 20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)

20c. TIME OF INJURY — Hour a. m. p. m. Month Day Year

20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐ — 20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.) — 20f. CITY, TOWN, OR LOCATION COUNTY STATE

DIABETES does not cause carcinoma

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

PART I. DEATH WAS CAUSED BY:
IMMEDIATE CAUSE (a) PULMONARY TUBERCULOSIS — INTERVAL BETWEEN ONSET AND DEATH: 6 MONTHS

Conditions, if any, which gave rise to above cause (a) stating the underlying cause last.
DUE TO (b) GENERALIZED ARTERIOSCLEROSIS — 2 YEARS
DUE TO (c)

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a). — 19. WAS AUTOPSY PERFORMED? YES ☒ NO ☐

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐ — 20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)

20c. TIME OF INJURY — Hour a. m. p. m. Month Day Year

20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐ — 20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.) — 20f. CITY, TOWN, OR LOCATION COUNTY STATE

GENERALIZED arteriosclerosis does not cause tuberculosis

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

PART I. DEATH WAS CAUSED BY:
IMMEDIATE CAUSE (a) PULMONARY TUBERCULOSIS, MODERATELY ADVANCED, ACTIVE — INTERVAL BETWEEN ONSET AND DEATH: 4 YEARS

Conditions, if any, which gave rise to above cause (a) stating the underlying cause last.
DUE TO (b) DECUBITUS ULCERS, MULTIPLE WITH INFECTION — 6 MONTHS
DUE TO (c)

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a). — 19. WAS AUTOPSY PERFORMED? YES ☐ NO ☒

MENTAL DEFICIENCY (IDIOPATHIC) SEVERE

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐ — 20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)

20c. TIME OF INJURY — Hour a. m. p. m. Month Day Year

20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐ — 20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.) — 20f. CITY, TOWN, OR LOCATION COUNTY STATE

ILLOGICAL—a and b probably should be reversed

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

		INTERVAL BETWEEN ONSET AND DEATH
PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a)	CEREBRAL THROMBOSIS	
Conditions, if any, which gave rise to above cause (a) stating the underlying cause last. DUE TO (b)	GENERALIZED ARTERIOSCLEROSIS	
DUE TO (c)	TERMINAL PNEUMONIA	
PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a).		19. WAS AUTOPSY PERFORMED? YES ☐ NO ☒

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐	20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)	
20c. TIME OF INJURY Hour a. m. p. m. Month Day Year		
20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐	20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.)	20f. CITY, TOWN, OR LOCATION COUNTY STATE

TERMINAL pneumonia if in (a) would be logical

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

		INTERVAL BETWEEN ONSET AND DEATH
PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a)	CHRONIC MYOCARDITIS	3 YEARS
Conditions, if any, which gave rise to above cause (a) stating the underlying cause last. DUE TO (b)	CEREBRAL HEMORRHAGE	6 DAYS
DUE TO (c)		
PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a).		19. WAS AUTOPSY PERFORMED? YES ☐ NO ☒

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐	20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)	
20c. TIME OF INJURY Hour a. m. p. m. Month Day Year		
20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐	20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.)	20f. CITY, TOWN, OR LOCATION COUNTY STATE

ILLOGICAL as to causation and time

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

		INTERVAL BETWEEN ONSET AND DEATH
PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a)	PNEUMONIA	5 DAYS
Conditions, if any, which gave rise to above cause (a) stating the underlying cause last. DUE TO (b)	CHRONIC LYMPHATIC LEUKEMIA	18 MONTHS
DUE TO (c)	ARTERIOSCLEROSIS	10 YEARS
PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a).		19. WAS AUTOPSY PERFORMED? YES ☐ NO ☒

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐	20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)	
20c. TIME OF INJURY Hour a. m. p. m. Month Day Year		
20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐	20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.)	20f. CITY, TOWN, OR LOCATION COUNTY STATE

LEUKEMIA and arteriosclerosis not causally related

CORONER'S CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

		INTERVAL BETWEEN ONSET AND DEATH
PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a)	CEREBRAL HEMORRHAGE	
Conditions, if any, which gave rise to above cause (a), stating the underlying cause last. DUE TO (b)	HYPERTENSION	
DUE TO (c)	FRACTURED PELVIS 10 MONTHS PRIOR TO DEATH	
PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a).		19. WAS AUTOPSY PERFORMED? YES ☐ NO ☒

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐	20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)	
20c. TIME OF INJURY Hour a. m. p. m. Month Day Year 2-20-1960		
20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐	20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.)	20f. CITY, TOWN, OR LOCATION COUNTY INDIANA STATE

ILLOGICAL sequence—fracture could not cause hypertension

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

		INTERVAL BETWEEN ONSET AND DEATH
PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a)	BRONCHOPNEUMONIA	1 DAY
Conditions, if any, which gave rise to above cause (a) stating the underlying cause last. DUE TO (b)	INFLUENZA	3 DAYS
DUE TO (c)	ASTHMA	?
PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a).		19. WAS AUTOPSY PERFORMED? YES ☐ NO ☒

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐	20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)
20c. TIME OF INJURY Hour a. m. p. m. Montb Day Year	
20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐	20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.) / 20f. CITY, TOWN, OR LOCATION COUNTY STATE

ASTHMA does not cause influenza

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

		INTERVAL BETWEEN ONSET AND DEATH
PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a)	CARCINOMA - CECUM	1 YEAR
Conditions, if any, which gave rise to above cause (a) stating the underlying cause last. DUE TO (b)	ARTERIOSCLEROSIS, GENERALIZED	5 YEARS
DUE TO (c)	BRONCHIAL PNEUMONIA	5 DAYS
PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a).		19. WAS AUTOPSY PERFORMED? YES ☐ NO ☒

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐	20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)
20c. TIME OF INJURY Hour a. m. p. m. Montb Day Year	
20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐	20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.) / 20f. CITY, TOWN, OR LOCATION COUNTY STATE

ILLOGICAL sequence—both in time and causation

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

		INTERVAL BETWEEN ONSET AND DEATH
PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a)	INFLUENZIAL VIRUS INFECTION	5 DAYS
	ACUTE PYONEPHRITIS	
Conditions, if any, which gave rise to above cause (a) stating the underlying cause last. DUE TO (b)	CHRONIC MYOCARDITIS	40 YEARS
DUE TO (c)	HYPERTHYROID DISEASE	40 YEARS
PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a).		19. WAS AUTOPSY PERFORMED? YES ☒ NO ☐

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐	20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)
20c. TIME OF INJURY Hour a. m. p. m. Montb Day Year	
20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐	20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.) / 20f. CITY, TOWN, OR LOCATION COUNTY STATE

CHRONIC myocarditis and hyperthyroid disease probably belong in Part II. Pyonephritis could not cause influenzial infection.

MEDICAL CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

		INTERVAL BETWEEN ONSET AND DEATH
PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a)	DIABETES	5 YEARS
Conditions, if any, which gave rise to above cause (a) stating the underlying cause last. DUE TO (b)	ARTERIOSCLEROSIS	15 YEARS
DUE TO (c)		
PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a).		19. WAS AUTOPSY PERFORMED? YES ☐ NO ☒

20a. ACCIDENT ☐ SUICIDE ☐ HOMICIDE ☐	20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)
20c. TIME OF INJURY Hour a. m. p. m. Montb Day Year	
20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☐	20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.) / 20f. CITY, TOWN, OR LOCATION COUNTY STATE

ARTERIOSCLEROSIS does not cause diabetes

CORONER'S CERTIFICATION

18. CAUSE OF DEATH [Enter only one cause per line for (a), (b), and (c).]

		INTERVAL BETWEEN ONSET AND DEATH
PART I. DEATH WAS CAUSED BY: IMMEDIATE CAUSE (a)	CHRONIC MYOCARDIAL DEGENERATION	5 YEARS
Conditions, if any, which gave rise to above cause (a), stating the underlying cause last. DUE TO (b)	ARTERIOSCLEROSIS	15 YEARS
DUE TO (c)	FRACTURE OF NECK OF LEFT FEMUR	9-10 MONTHS

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I (a).

CEREBRAL ARTERIOSCLEROSIS WITH PSYCHOTIC REACTION

19. WAS AUTOPSY PERFORMED? YES ☐ NO ☒

20a. ACCIDENT	SUICIDE	HOMICIDE	20b. DESCRIBE HOW INJURY OCCURRED. (Enter nature of injury in Part I or Part II of item 18.)
☒	☐	☐	FELL TO FLOOR, SAME LEVEL

20c. TIME OF INJURY	Hour a. m.	Month	Day	Year
5:50	XXX	7	27	1961

20d. INJURY OCCURRED WHILE AT WORK ☐ NOT WHILE AT WORK ☒	20e. PLACE OF INJURY (e. g., in or about home, farm, factory, street, office bldg., etc.)	20f. CITY, TOWN, OR LOCATION	COUNTY	STATE
	BATHROOM ON WARD		WAYNE	INDIANA

ARTERIOSCLEROSIS or injury should be in Part II. The temporal sequence is wrong.

It might be argued that, in most of the above cases, the physician's intent was obvious, and that the statistician should be able to assign the death to the cause intended without querying the physician. However, this is the very point at issue—the cause of death must be assigned on the basis of the physician's judgment—not according to the statistician's judgment of the physician's intent. ◄

Detergent Suds Instead of Water

Turning on the faucet these days may result in a flow of detergent suds instead of pure water. The problem is nationwide.

In small communities, the detergent waste from homes seeps through the soil into well water. In fact, so much detergent waste now seeps through the soil that the "runoff" water in the watersheds of big city reservoir systems is also being polluted.

Normally, waste matter in soil is broken down by bacterial action. Detergents, however, are man-made synthetics, unaffected by bacteria.

Consultation with water control experts indicates that the problem cannot be efficiently solved at the faucet-point, but must be tackled before the water gets into the pipes which lead into dwellings.

If the water is aerated, the suds will form and float on the surface. They can then be skimmed off. This process is easily applied in the case of reservoir systems for large cities. But it may not be as simple in those communities where water is drawn from wells.

Obviously, a new health problem is in the making.—*New Medical Materia,* February, 1963.

Lifts depression..



"I feel like my old self again!" Thanks to your balanced Deprol therapy, her depression has lifted and her mood has brightened up – while her anxiety and tension have been calmed down. She sleeps better, eats better, and normal drive and interest have replaced her emotional fatigue.

as it calms anxiety

Brightens mood...relaxes tension

While energizers may stimulate the patient when she is depressed—*they often aggravate her anxiety, tension and insomnia.*

And although tranquilizers may help the patient when she is tense and anxious – *they often deepen her depression and emotional fatigue.*

These "seesaw" effects are avoided with Deprol. It lifts depression as it calms anxiety—a balanced action that brightens the mood, relaxes tension, and relieves insomnia, anorexia and emotional fatigue.

Exceptionally well tolerated. In four years of clinical use no liver toxicity, hypotension, psychotic reactions or changes in sexual function have been reported with Deprol.

Compatible with therapy for physical diseases. Deprol does not complicate specific therapies for cardiovascular, G.I. and upper respiratory conditions.

Energizers relieve depression





Deprol both lifts depression and calms anxiety





Tranquilizers reduce anxiety

Dosage: Usual starting dose is 1 tablet q.i.d. When necessary, this may be increased gradually up to 3 tablets q.i.d. With establishment of relief, the dose may be reduced gradually to maintenance levels.

Composition: 1 mg. 2-diethylaminoethyl benzilate hydrochloride (benactyzine HCl) and 400 mg. meprobamate.

Supplied: Bottles of 50 light-pink, scored tablets. Write for literature and samples.

▲Deprol▲®

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CO-7395

Delivered before the first annual Congress on Mental Health, sponsored jointly by the Indiana State Medical Association and the Indiana Association for Mental Health, February 20, 1963, at Indianapolis.

Changes Coming in Nation's Mental Health Profile

*EDWARD R. ANNIS, M.D.**
Miami, Florida

ALL OF YOU, I hope, are familiar with the American Medical Association's new mental health program. To date, this program has received enthusiastic response from organizations and individuals all over the country.



However, fulsome praise means little until it is translated into positive actions and deeds. This meeting today is a perfect example of how we hoped state and local medical societies and individual physicians would act to carry out the program's intent.

And Indiana is not alone in this venture. A number of states have scheduled mental health meetings modeled after last October's AMA National Congress on Mental Illness and Health; many are planning to present state tailor-made versions of the national program to their house of delegates for approval and implementation; and others are working on specific portions of the program which have particular relevance in their state.

I am not qualified, nor is it my place, to discuss the specific mental health proposals made by your state mental health department or the supplementary plans of Indiana's congress steering committee—I am sure that Doctors Glock, Burns and Ginsberg will cover all the salient points. However, as an outsider, I do want to note that they seem most comprehensive and, when activated, will surely place Indiana among the mental health leaders in the country.

I did notice that the Indiana report laid special stress on the role of the county medical society in assuming responsibility for planning, developing and coordinating mental health facilities and services.

Progress at Grass Roots Level

This is as it should be. It is obvious that the new emphasis in mental health is towards community-centered treatment centers. Comprehensive community programs and facilities are the keystone of the AMA's mental health program and, certainly, many of the proposals made in the Administration's mental health message hew to this concept. However, as this movement back to the community grows and develops, it will place an extra burden of responsibility on community members and leaders. Your national AMA and your state association will do all they can to help local efforts—but the real progress in combating mental illness is going to come at the grass roots level.

If this is so, then every physician has an added responsibility—a responsibility above and beyond seeing to it that a piece of legis-

Continued

* President-Elect, American Medical Association.





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lation is passed or that this new rehabilitation center or psychiatric unit gets built. As more and more mental patients are treated in their home environment and as more and more hospitals develop comprehensive in and out-patient services, more and more physicians will become involved in the care and treatment of the mentally ill.

As this community-oriented mental health movement develops, we will see major changes and improvements in the nation's mental health profile. And I suspect these changes will occur faster than a lot of us realize. As they occur, the non-psychiatrist physician will play an ever increasing role as a member of the community's mental health team.

This is not to say that the non-psychiatrist is going to don the robes of his psychiatrist colleague—far from it. But he is going to be responsible, within his competence, for the detection and, perhaps, management of some mental disorders just as he assumes responsibility for patients with organic disorders.

New Sources of Knowledge

The physician's mental health armamentarium has been reinforced with a battery of new drugs and knowledge. The American Academy of General Practice-American Psychiatric Association postgraduate courses are excellent examples of how, in a short time, the family doctor can gain an all-important grounding in psychiatric know-how. Of course, it's nothing new for physicians to spend time counseling patients with emotional problems but what is new is a systematic body of knowledge which enables the physician to rely on more than personal intuition and experience.

Changes also are taking place in undergraduate and graduate medical education and there is far greater emphasis on the principles of psychiatric medicine and the behavioral sciences. In general hospitals with integrated psychiatric units, interns and residents are working with and learning how to manage the mentally ill.

All of this is bringing a new look to medical practice today and, perhaps, a newer look to medicine in the future. But what is also necessary is to bring a new look to society's concept of the mentally ill.

It was society that originally decided that the mentally ill were "strange, bizarre" people who can no longer live with their family and friends. And it is this same society which must and will recognize the fact that many of these same people can, with the aid of modern medical knowledge, continue in their everyday roles.

The emotionally ill are somebody's child, father, mother, friend or neighbor. As communities gain in mental health facilities, these people will, in many cases, no longer be whisked off to some remote treatment center—they will no longer be "put away." Instead, they will receive supportive treatment in their home environment and, in many instances, continue their normal jobs and social routines.

Emotional Illness Not Understood

As this happens, we also must bear the responsibility for educating the public about the mentally ill. We physicians can say that mental illness is a disease but, to the average person, disease is a purely physical thing. A brain tumor or stroke will produce changes in behavior which people will recognize and accept; families will do everything possible to help the bedridden, terminal cancer patient, but, for some reason, they lack the same kind of understanding for mental illness.

It's highly improbable that we will be able to eradicate mental diseases—they are here to stay. Americans have learned to live with the Cold War, with smog, with slums, with overcrowded schools, and although we accept these unpleasant facts of life, we are still trying to find positive, viable solutions. We must adopt the same modus vivendi for mental illness.

I think it is vital to emphasize and reemphasize the fact that if a person suspects mental illness, he should see his family doctor. This is not to say that the family physician will be able, in all cases, to diagnose and/or treat the disturbance but it will help to put mental illness into the framework of

Continued on page 466

solid results!

This is the kind of response you can expect with Robinul therapy.

Because Robinul's anticholinergic action is so specific, so intense, and so consistent, it provides a favorable internal environment for ulcer healing.

Positive suppression of gastric acid volume. Moeller[1] demonstrated that 2 mg. of Robinul decreases the volume of HCl secreted by 73% within one hour and 85% within two. Epstein[2] described Robinul's "intensive antisecretory action" as "exemplary."

Significant increase in gastric pH. In his studies comparing the effect of anticholinergics on gastric pH, Sun[3] found that the optimum effective dose of Robinul "... produced suppression of gastric acidity to pH 4.5 or higher in all 16 patients examined." Posey[4] reported "an excellent reduction of gastric acidity ... in 12 of 15 patients...."

Desirable antimotility effect. Young and Sun[5] found that although Robinul (given subcutaneously) demonstrated its ability to suppress antral motility, a 2 mg. oral dose "did not affect gastric emptying or intestinal transit time" in six patients with duodenal ulcer.

New freedom from side effects. Robinul has shown that an anticholinergic need not be plagued with a high percentage of side effects. Of 1705 patients in clinical investigations, many of whom were studied on above-normal doses, fewer than 7% experienced side effects of a moderate-to-severe degree, with only 3% requesting discontinuance of the medication.

PRESCRIBING INFORMATION:

Robinul and Robinul-PH have provided good to excellent results in 83.1% of 795 reported cases of peptic ulcer.

SIDE EFFECTS: Dryness of mouth, blurred vision, urinary difficulties, and constipation are seldom troublesome and may generally be controlled by reduction of dosage. Other unwanted effects such as rash have been reported, but only very rarely.

PRECAUTIONS: Administer with care to patients with incipient glaucoma. Contraindicated in acute glaucoma, prostatic hypertrophy, and in presence of urinary bladder neck obstruction or pyloric obstruction or stenosis with significant gastric retention. Robinul-PH is contraindicated in patients sensitive to phenobarbital or with advanced hepatic or renal disease.

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*U. S. PATENT NUMBER 2,956,062

an individual's experience with other illnesses.

The important thing is to get the citizen to accept mental treatment and counseling as a full-fledged, legitimate part of his general medical care. I think, for example, that it is important if the family physician refers his patient to a psychiatrist for diagnosis or a psychologist for testing that he be the one to relay the findings. Also that whenever feasible, he should participate in whatever therapeutic measures are necessary. And, also, that he should stress the point that mental illness is really nothing so unusual or strange. In fact, it's so common that even he, the family doctor, can help treat it.

There are many things which we can and must do to see to it that the mental patient gets the same high quality, readily available care that we now give the physically ill. And, as is happening in Indiana, it must be the medical society's responsibility to see to it that the necessary solutions are found and applied. ◄

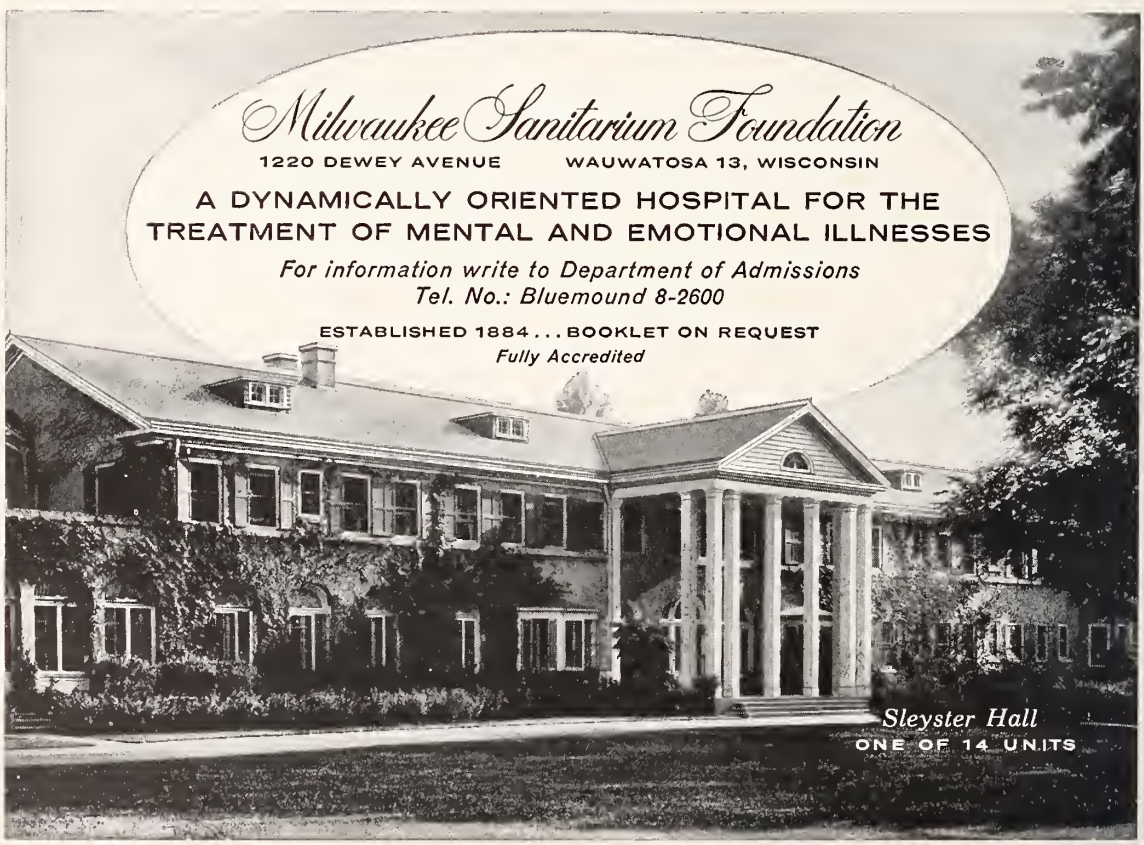


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Sodoku is a synonym for the type of rat-bite fever occurring in the heavily populated Far East. The causative organism is *Spirillum minus,** a flagellated spirochete easily identified in dark-field preparations by its quick, darting motility. Besides the bandicoot,* indigenous to India and Ceylon, other rodents, ferrets and cats spread the disease. During the incubation period, which lasts from five to sixty days, the bite wound* heals, only to become inflamed and edematous with the onset of the acute stage. Fever, malaise, and a characteristic purplish maculopapular rash mark the eruption of the disease. Without treatment, relapses may recur periodically for four to six weeks.

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Yes—How Much?

A. W. CAVINS, M.D.
Terre Haute

Physicians are not the only ones deeply concerned about proposals to load the cost of socialized medicine onto the back of the Social Security camel. Far heavier than that famous last straw, it could easily break the camel's back—in fact, we wonder how it could help doing so. A vice-president of Time Insurance Company of Milwaukee, Mr. S. L. Horman, addressed a Neenah-Menasha Chamber of Commerce banquet May 15, 1962, on "How Much Social Security Can We Afford?" and his talk was published in the *Wisconsin Medical Journal*, December, 1962. Excerpts follow:

"In Wisconsin we have 395,000 citizens 65 or over. Where need exists, it is given. There are 400,000 youngsters under age 5, and where need exists, a remedy is devised. There is no person suffering from lack of medical care, and for those people who do need it, care can be provided on a local basis.

"In summation, I believe these are facts worthy of consideration:

1. There are so many proposals of different activities for the government to take over from individuals and states that people are completely confused.
2. There is every reason to believe that within the next decade we shall be contributing 20% of earned income to support Social Security, even without further give-away amendments.
3. The rate of increased taxation, the growing number of subsidies, and controls, the continued expansion of government-owned businesses, and the unbelievable number of individuals receiving checks from the Federal Treasury are at the critical point of tipping our American scales toward the sterile abyss of socialism.
4. We cannot compare our social and economic program with the decadent philosophy of European countries where *compulsory* medicine resulted in totalitarianism, socialism, communism or complete chaos.

"I further believe these are conclusions and questions we must face:

1. Do we have the moral right to penalize the generation of wage earners now coming up to sacrifice that amount to provide our security, and
2. Is it not our obligation to protect the birthright and privilege we have enjoyed for those who are to follow after us? Why shackle them with a taxload and abnegation of the opportunities of free enterprise because of our apathy in accepting a decadent philosophy that brought nothing but chaos in Europe where it was first practiced?

"There is nothing more discouraging than a hope or a promise that is unfulfilled. The present generation depends upon us for the perpetuation of joys and privileges we enjoy today. It is up to us to justify that faith by not giving away their rightful heritage because of our own selfishness.

"The situation is not hopeless—all we have to do is get back to basic fundamentals—earn the right to enjoy the freedom and fruits of our system of free enterprise and not let it go by default by deceiving ourselves into thinking we can get something for nothing. Let us not run the risk of having some future generation refer to us by saying—*'They thought they could have just a little socialism.'* "

If you are interested in this line of reasoning, the AMA has some cogent leaflets which are easy to distribute in your office, on the threat to the Social Security system as it now is contained in Fedicare proposals. It has been a continuing comfort to me to find many patients reading these in my consultation room and to have so many of them seem gratified when told they were welcome to take copies home. Many are wondering how much Social Security we can afford, and we are glad to have factual data—not propaganda—made available. ◄

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SUPPLIED: *Bottles of 16 fl. oz. (raspberry flavor, pink color)*
Exempt Narcotic. Available on Prescription Only.

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Before prescribing be sure to consult Winthrop's literature for additional information about dosage, possible side effects and contraindications.



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TAPES OF THE MONTH

OBSTETRICS AND GYNECOLOGY

OG-783 **STIMULATION OF OVULATION** — Phillip S. Crossen, M.D., Lexington, Ky. Recorded: Kentucky State Meeting. Date: Sept. 18, 1962. Time: 20 minutes.

OG-784 **MANAGEMENT OF INCOMPLETE ABORTIONS AT WRIGHT-PATTERSON AIR FORCE BASE HOSPITAL**—Capt. James R. Schrand, M.C., Dayton, Ohio. Recorded: Kentucky State Meeting. Date: Sept. 18, 1962. Time: 12 minutes.

OG-785 **MEDICAL CARE, CARDIOVASCULAR AND OBSTETRICAL MANAGEMENT IN THE PREGNANT CARDIAC PATIENT**—Curtis L. Mendelson, M.D., Abaco, Bahamas. Recorded: Kentucky State Meeting. Date: Sept. 18, 1962. Time: 40 minutes.

OG-786 **HYPOGLYCEMIA IN THE NEONATAL PERIOD**—Gerard B. Odell, M.D., Richmond, Va. Recorded: Kentucky State Meeting. Date: Sept. 20, 1962. Time: 30 minutes.

OG-787 **HYPERBILIRUBINEMIA IN THE NEONATAL PERIOD**—Gerard B. Odell, M.D., Richmond, Va. Recorded: Kentucky State Meeting. Date: Sept. 19, 1962. Time: 30 minutes.

GENERAL

G-1201 **SIGHT SAVING MEASURES FOR GENERAL PRACTITIONERS** — Alston Callahan, M.D., Birmingham, Ala. Recorded: Kentucky State Meeting. Date: Sept. 20, 1962. Time: 25 minutes.

G-1202 **PANEL ON ATHLETIC INJURIES**—O. B. Murphy, M.D., Lexington, Ky., moderator; R. J. Angelucci, M.D., Lexington, Ky.; George Gumbert, Jr., M.D., Lexington, Ky. Recorded: Kentucky State Meeting. Date: Sept. 20, 1962. Time: 1 hour, 25 minutes.

G-1203 **THE PRIVATE PRACTITIONER AND HIS RELATIONSHIP WITH INDUSTRIAL MEDICINE**—Mac Roy Gasque, M.D., New York, N. Y. Recorded: Kentucky State Meeting. Date: Sept. 20, 1962. Time: 22 minutes. ◄

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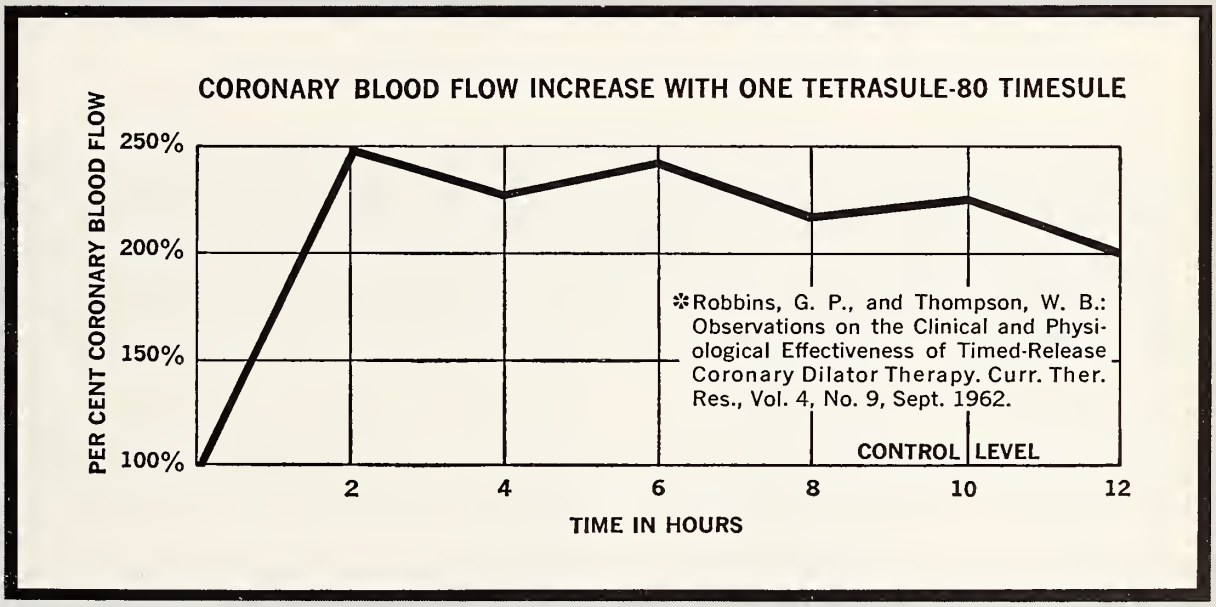


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ABSTRACTS

BOOK REVIEWS

METABOLIC EFFECTS OF ADRENAL HORMONES

Ciba Foundation Study Group No. 6 under editorship of G. E. Wolstenholme and Maeve O'Connor. Little, Brown & Co., Boston, Mass., 1961. 109 pages. $2.50.

It was Addison who first described the clinical significance of adrenal ablation. In 1960, the centenary of this great clinician's death was observed by this present admirable symposium.

We have come a long way from Bayliss and Starling coining the word, hormone, and theorizing: one gland → one hormone → one function. It is only a dozen years or so since Hench discovered the tremendous effects produced by the steroid compounds extracted from the adrenals. I suppose that the work of the next 50 years will make our present knowledge seem primitive.

Be that as it may, the summary of our knowledge gathered in the present, vest pocket booklet does put together most admirably our present thinking on the structures and actions of the adrenal cells. We are advancing rapidly to the goal of synthesizing specific corticosteroids that avoid undesirable side-effects and emphasize the uses desired.

Protein synthesis, cortisone activity in the liver, the intricate meshing of the insulin effects and the correlation of carbohydrate and fat metabolisms—all are ably elucidated. The discussions are crisp and not too technical; the pithy summaries are especially meaty. While geared to the expert and already obsolescent, there is much here that the practicing physician can read with pleasant profit.

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

ENZYMES AND DRUG ACTION

Ciba Foundation Symposium edited by A. V. S. de Reuck. 556 pages with illustrations, plates and tables. 1962. $12.50.

This is almost a verbatim report of a meeting held by the very distinguished biochemists and pharmacologists who are in the process of transforming "molecular medicine" into reality. It is a pity that there was no one present with a medical background to really edit and make comprehensible just what these splendid scholars were debating.

The topics are certainly most intriguing: active transport, digitalis, insulin, drug tolerance, subcellular mechanisms of drug metabolism and many

1 2 3 4
clinical studies repeat...

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See PDR for packaging.
Protected by U.S. Patent Numbers: 2,661,372 and 2,661,373.

1 "significant hearing improvement" occurred with Arlidin in 32 of 75 patients with recent onset hearing impairment due to labyrinthine artery ischemia.
Rubin, W. and Anderson, J. R.: Angiology 9:256, 1958.

3 Arlidin "appears to be one of the most satisfactory [vasodilators], having the advantages of minimal side effects, being well tolerated and possessing a sustained action" in improving circulation of the inner ear.
Seymour, J. C.: Laryngology & Otology 74:133, 1960.

other topics just as tantalizing. Careful—even laborious — reading reveals basic disagreements and vast gaps in the knowledge of even these experts. Frankly, I cannot say that my own ignorance was alleviated in any real way; if anything, I remained more confused.

I have the impression that a consensus is imminent in many fields of vast importance to the practice of medicine. At that time, someone will tell us clearly just what it will be all about. The present effort cannot be recommended to anyone but the most advanced research student in the areas being analyzed.

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

Abstracts From Various Literature, Prepared by AMA

ENDOTOXIN SHOCK

Endotoxin shock is a state of peripheral vascular collapse caused by a lipo-carbohydrate-protein complex found in gram-negative bacteria, especially in the coliform group. Infections caused by *Escherichia coli*, *Aerobacter aerogenes* and *Proteus* organisms are the most common cause. The most serious complication is renal failure, and the mortality rate is over 70%. Experimental studies in dogs and monkeys have been directed along two main lines. First, in what way does endotoxin initiate shock? Second, how can endotoxin be reversed? Endotoxin is mediated through a heat-labile factor in blood, possibly complement, with the liberation of vasoactive substances, especially histamine, and also epinephrine, norepinephrine and serotonin. Vasoconstriction and vasodilation result with the pooling and stagnation of blood, and a reduced cardiac output. The primary difficulty is the deficient perfusion of tissues and organs with oxygenated blood.

Spink, W. W.: Endotoxin Shock, *Ann. Intern. Med.* 57:538 (Oct.) 1962.

FATAL CASES SUBSEQUENT TO APPLICATION OF ANTIBIOTICS

Three deaths are reported following the injections of procaine-penicillin and streptomycin. The first patient was a 25-year-old man. Because of a sore throat he called on a physician, who diagnosed tonsillitis and administered an injection of 800,000 units of procaine-penicillin as well as 1 gm. of streptomycin and sent the patient home. Half an hour later the man felt sick and commenced suffocating. A physician found the patient pulseless, not breathing, and in a state of deep shock. On the way to a hospital the patient died. The other two patients, women aged 50 and 35, respectively, died after the same dosage of procaine-penicillin and

2

vascular insufficiency of the labyrinth is an important etiologic factor in sudden perceptive deafness . . . "vasodilators [Arlidin] are of considerable value."

Wilmot, T. J. and Seymour, J. C.: Lancet 1:1098, 1960.

4

early cases of sudden perceptive deafness should be treated by immediate stellate block "supplemented by the most effective vasodilator drug [Arlidin] . . . energetic measures to retain blood supply to the inner ear are imperative."

Wilmot, T. J.: J. Laryngology & Otology 73:466, 1959.

in impaired hearing, tinnitus, vertigo . . .

when due to ischemia of the inner ear . . .

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brand of nylidrin hydrochloride N.F.

Clinical benefit in approximately 50% of cases of recent onset hearing loss treated with adequate vasodilator and other supportive therapy is also reported by Sheehy.

Sheehy, J. L.; Laryngoscope 70:885, 1960.

IMPORTANT: Before prescribing ARLIDIN the physician should be thoroughly familiar with general directions for its use including indications, dosage, precautions and contraindication. Write for complete detailed literature.

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streptomycin as did the first patient. In all three cases death occurred with symptoms of anaphylactic shock shortly after the injection of penicillin and streptomycin. None of the patients was suffering from any disease that of itself could have caused death. The post-mortem findings indicated anaphylactic shock.

Stajduhar, Z.: Fatal Cases Subsequent to Application of Antibiotics, *J. Forensic Med.* 9:59 (April-June) 1962.

ADRENAL FUNCTION IN SURGICAL PATIENTS AFTER STEROID THERAPY

This study represents an endeavor to predict which patients require steroid cover for operation after previously receiving steroid therapy. All patients suffered from the same disease, ulcerative colitis, and were treated by the same surgical team. All submitted to a preoperative corticotropin test (25 international units in 500 ml. saline intravenously for six hours, blood hydrocortisone levels being monitored by a modification of the colorimetric procedure of Silber and Porter); hydrocortisone levels were subsequently monitored throughout the period of operation to the fourth postoperative day in all patients. In all of a contratest group of 17 patients who had received no previous steroid therapy blood cortisol levels rose in response to corticotropin and to operation; none of these patients showed any clinical evidence of adrenal collapse. Eighteen patients had had steroid therapy previously; of these three showed no response to corticotropin and had low resting levels of hydrocortisone one of whom was given cover and did not collapse during the operative period. The other two were given no cover; hydrocortisone levels failed to rise during operation, collapse occurred and the blood pressure was restored pari passu with rising hydrocortisone levels as hydrocortisone was given intravenously. The conception of collapse under stress due to adrenal failure based on clinical evidence therefore receives biochemical confirmation.

Sampson, P., Winstone, N. E., Brooke, B. N.: Adrenal Function in Surgical Patients After Steroid Therapy, *Lancet* (London) 2:322 (Aug. 18) 1962.

W. B. SAUNDERS COMPANY features the following new editions in their full page advertisement appearing elsewhere in this issue:

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HINSHAW and GARLAND—Diseases of the Chest
A useful book unsurpassed for vividness of illustration and completeness of coverage.

THALIDOMIDE AND LIMB DEFORMITIES

The occurrence of deformities following the administration of thalidomide during pregnancy is considered in relationship to experimental methods of producing limb abnormalities. It is pointed out that malformations similar to thalidomide deformities can be produced in animals by a wide variety of substances, including vitamin deficiencies, vitamin A excess, tumor-inhibiting chemicals, physical agents, certain antibiotics, and other drugs. Like other teratogenic agents, thalidomide produces a number of different malformations. Not all mothers who took thalidomide during the first trimester of pregnancy gave birth to malformed babies. This accords with findings in animal experiments and suggests that another factor is concerned, possibly hormonal, nutritional or psychogenic.

Millen, J. W.: Thalidomide and Limb Deformities, *Lancet* (London) 2:599 (Sept. 22) 1962.

APLASTIC ANEMIA SECONDARY TO ANTICONVULSANT MEDICATION

A case of anticonvulsant-induced aplastic anemia, with recovery after bone marrow transfusion from an identical twin, is presented. Forty-eight cases of aplastic anemia secondary to anticonvulsant medications are reviewed. The majority of the cases were secondary to ingestion of phenylethylmethylhydantoin (Mesantoin) or trimethadione, but it is suggested that most anticonvulsant drugs could have potential for marrow damage, since all are derived from a basic chemical structure. Mortality in the cases reviewed was high (77%) and the recovery time was prolonged. The current therapy for aplastic anemia is briefly discussed, and it is suggested that bone marrow transfusion may become a useful form of therapy as advances in the field of immunology make homologous transplantation feasible.

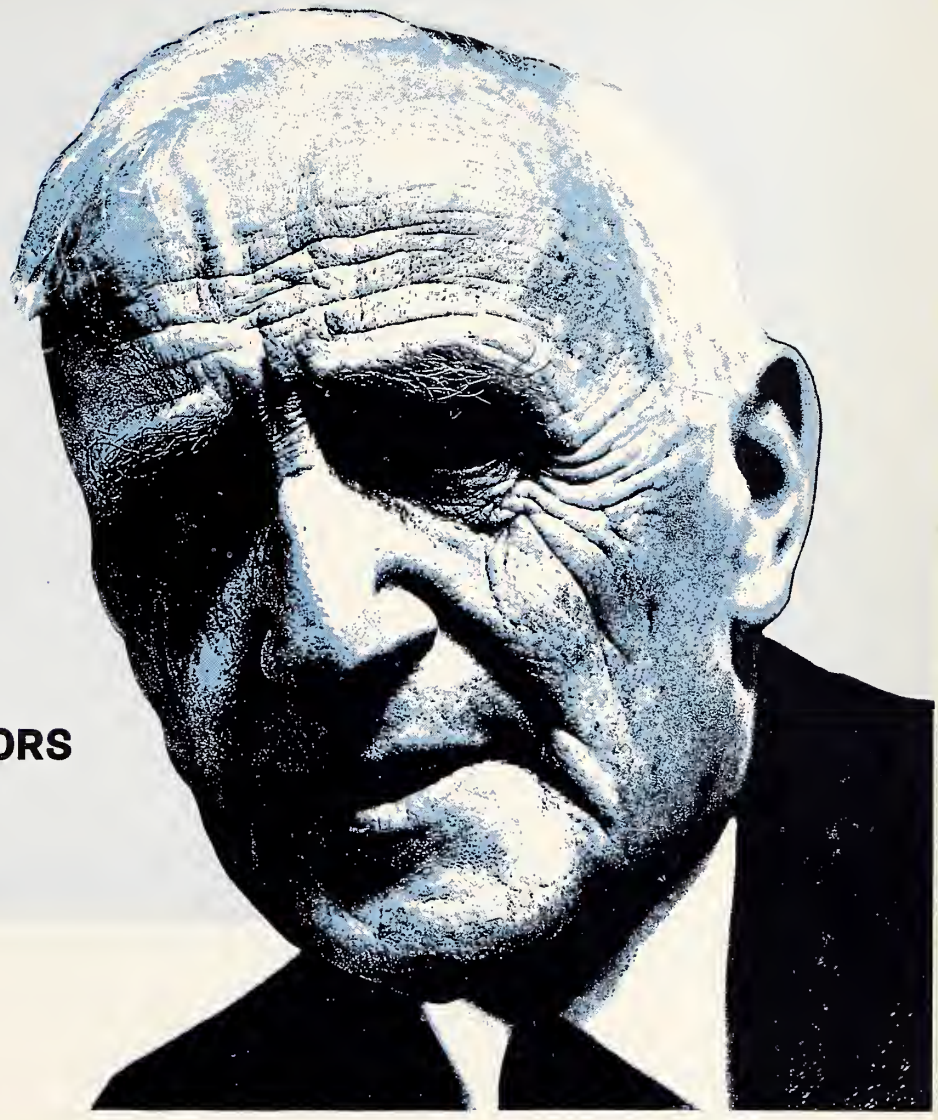
Robins, M. M.: Aplastic Anemia Secondary to Anticonvulsant Medication, *Amer. J. Dis. Child.* 104:614 (Dec.) 1962.

DEVELOPMENTAL RENAL ARTERY STENOSIS

A form of renal artery stenosis hitherto unrecorded due to compression by the crus of the diaphragm or the psoas minor is described. Two cases (one bilateral) showing the typical changes of renal ischemia in pyelographic and aortographic studies and both with severe hypertension were cured by division of the constricting fibers. This division abolished the pressure difference between aorta and artery, restored the pyelographic appearances, urinary excretion, and shrunken size of

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1. Ford, R. A., and Blanchard, K. P.: J.-Lancet 78:185, 1958.

Precaution: Occasionally, mild salicylism may occur, but this responds readily to dosage adjustment. In the presence of severe renal impairment, care should be taken to avoid accumulation of salicylate and PABA. Supply: Bottles of 100 and 500 enteric-coated tablets.

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the kidneys to normal, and produced normotension. The methods of surgical exposure of the aorta-renal artery junction are discussed and an extrapleural extraperitoneal approach with division of the crus is advocated as the simplest, safest, and quickest. Positioning of the patient during catheter aortography to determine this form of stenosis is described.

d'Abreu, F., Strickland, B.: Developmental Renal Artery Stenosis, *Lancet* (London) 2:517 (Sept. 15) 1962.

GRAM-NEGATIVE BACTEREMIA: I. ETIOLOGY AND ECOLOGY

One hundred seventy-three patients with gram-negative bacteremia were observed at the University of Illinois Hospitals during an eight-year period. Both the frequency of bacteremia and the number of fatalities increased progressively during this period. The more frequent causes were *Escherichia coli* and *Aerobacter aerogenes*, but *Pseudomonas* and mixed species were more frequent in severe underlying diseases. Middle-aged women and elderly men were most frequently affected. The most important determinant of the outcome was the nature and severity of the underlying host disease. Hospital acquired bacteremia was more lethal than nonhospital acquired infection but age, sex, antibiotic prophylaxis, prior operation, or infecting bacterial species per se did not appear to affect the outcome.

McCabe, W. R., Jackson, G. G.: Gram-Negative Bacteremia: I. Etiology and Ecology, *Arch. Intern. Med.* 110:847 (Dec.) 1962.

GRAM-NEGATIVE BACTEREMIA: II. CLINICAL, LABORATORY AND THERAPEUTIC OBSERVATIONS

Clinical, laboratory, and therapeutic features of 173 cases of gram-negative bacteremia were reviewed to further clarify this syndrome and allow earlier recognition and treatment. Sudden chills, fever, vomiting, diarrhea and shock were characteristic. Transient oliguria, nitrogen retention, hyperkalemia, hyponatremia, hypochloremia, and a decreased CO_2 were common. Prior steroid therapy tended to increase the frequency of shock and fatalities among patients without serious underlying disease. Antibiotic therapy was most effective if infecting strains were sensitive in vitro, which occurred in only 50% of cases. Combinations of antibiotics selected arbitrarily did not improve the survival rates.

McCabe, W. R., Jackson, G. G.: Gram-Negative Bacteremia: II. Clinical, Laboratory and Therapeutic Observations, *Arch. Intern. Med.* 110:856 (Dec.) 1962. ◄

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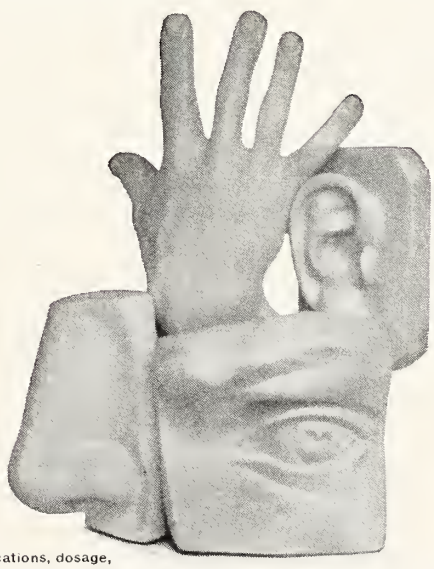
ACHROMYCIN Ophthalmic Oil Suspension 1% instills tetracycline at full potency in liquid form at the site of superficial ocular infections. Highly concentrated broad-spectrum activity is localized at the site of infection, with a minimal occurrence of patient intolerance or tissue toxicity. Susceptible organisms are controlled earlier and more effectively.

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Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Res Ipsa Held to Apply in Anesthesia Death—A New York trial court, Kings County, found the doctrine of res ipsa applied, "for otherwise it would be impossible for a plaintiff ever to recover in such a case, since the facts are entirely within the knowledge of the persons attending the patient."

This case involved an action for the death of an infant who died while being administered anesthesia prior to surgery for correction of feet deformities. The court found there was absolute supervision and control by the defendants. The court said the term res ipsa is often used in malpractice cases where what is meant is that the evidence is clear enough to be comprehended by laymen without the aid of expert testimony. "A protection for a patient is the recognition by the courts that often a jury will be able to comprehend negligent treatment even without a physician pointing the same out to them."

The court added that the "increasing use of res ipsa loquitur exemplifies the growing recognition of the courts of the special obligations which arise from particular relationships. Where the particular defendant is in a position of some special responsibility toward the plaintiff or the public, the doctrine is designed to protect the dependent party from unexplained injury at the hands of one in whom he has reposed trust. In an integrated society where individuals become inevitably dependent upon others for the exercise of due care, where these relationships are closely interwoven with our daily living, the requirement for explanation is not too great a burden to impose upon those who wield instruments of injury and whose due care is vital to life itself. Such a duty is now recognized and declared to arise in view of the special relationship such as exists between doctor and patient."

Sawyer v. Jewish Chronic Disease Hospital, 234 N.Y.S. 2d 372 (N. Y., Oct. 29, 1962). ◄

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Soma relieves stiffness —stops pain, too

YOUR CONCERN: Rapid relief from pain for your patient. Get him back to his normal activity, fast!

HOW SOMA HELPS: Soma provides direct pain relief while it relaxes muscle spasm.

YOUR RESULTS: With pain relieved, stiffness gone, your patient is soon restored to full activity—often in days instead of weeks.

Kestler reports in controlled study: *Average time for restoring patients to full activity: with Soma, 11.5 days; without Soma, 41 days.* (*J.A.M.A. Vol. 172, No. 18, April 30, 1960.*)

Soma is notably safe. Side effects are rare. Drowsiness may occur, but usually only in higher dosages. Soma is available in 350 mg. tablets. **USUAL DOSAGE: 1 TABLET Q.I.D.**

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Richard A. Beison, 424 Ware Ave., Scott Air Force Base, Ill.

Ralph J. Langsjoen, 340 E. Bay Blvd., Traverse City, Mich.

John R. Repaire, 1011 Patrick St., Flint 3, Mich.

SPECIALISTS

Shaotsu Lee, 160 Beach 137th St., Belle Harbor, New York, N. Y.—*Anesthesiology*

David O. Merifield, 20 Kiernan Dr., Chanute Air Force Base, Ill.—*Ear, Nose and Throat*

George E. Gorsuch, 2339 Tallahassee, Hayward, Calif.—*Internal Medicine—Cardiology*

Thomas D. Geracioti, 2023 N. Lexington St., Arlington, Va.—*Internal Medicine*

Russell E. Hanlon, Jr., 1606 Highridge Circle, Columbia, Mo.—*Ob-Gyn.*

George Naryshkin, 472 King Ave., Collingswood, N. J.—*Ob-Gyn.*

Roy E. Manning, 3412 High Mesa Dr., Dallas, Tex. —*Ob-Gyn.*

Joseph G. Seeger, Box 97, USAF Hospital, Tachikawa, APO 323, San Francisco—*Ophthalmology*

James G. Pryor, 258 South 29th St., Camden, N. J. —*Ophthalmology*

Thomas E. Durham, 318 E. Thrush St., Peoria, Ill. —*Orthopedics*

Henry J. Waive, 303 Norman Rd., Portsmouth, Va. —*Orthopedics*

Ned B. Chase, USAF Hospital, APO 633, New York, N. Y.—*Orthopedics*

Octavio M. Cortes, New York University School of Medicine, Department of Radiology, 550 First Avenue, New York 16, N. Y.

Lon E. Curtis, 100 Goddard Ave., Brookline 46, Mass.—*Surgery*

Arthur M. Branco, 9387 Manorford Dr., Parma Heights 30, Ohio—*General Surgery*

Ronald D. Graber, 333 East Huron St., Chicago, Ill.—*General Surgery*

Clarence G. Novak, 1901 Manchester Ave., Westchester, Ill.—*General Surgery*

Alan D. Ferguson, 16534 Lindsay, Detroit 35, Mich. —*General Surgery (Hand)*

James M. Chase, Jr., 261 Castle Dr., Atwater, Calif.—*General Surgery*

George B. Perlstein, Jr., Department of Urology, Veterans Administration Hospital, Des Moines, Iowa—*Urology*

LOCATIONS

Wayne County—RICHMOND—population 39,600. Located on U. S. 40. There is a need for several physicians who are interested in doing general practice. Reid Memorial Hospital located in Richmond. Contact William R. Stilwell, 2607 South C Place, Richmond, for further details. ◄



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Photograph professionally posed.



1962 Record Year for Indiana Health Care Plans

(One of a series prepared by Blue Cross-Blue Shield)

Indiana Blue Shield marked a year of record-breaking growth in 1962, establishing new highs in the number of persons enrolled, the number receiving benefits and the value of benefits provided members.

Year-end figures for Blue Shield also revealed that it was the best year ever in terms of low-cost operating efficiency, protection for the 65 and over and upgraded benefits.

Blue Shield enrollment reached 1,469,670 as of December 31, 1962. This represented a net gain of 38,419 for the year, and the membership figure was the largest ever.

A total of $20,721,436 was paid for members' doctor bills during the year, the largest amount paid out in any one year since the plan was organized. The comparable 1961 total was $17,957,496.

The number of claims for the year was also the largest ever, totaling 587,213 as compared to the 1961 figure of 514,991.

Indiana Blue Shield since organization in 1946 has now paid to doctors a grand total of more than 140 million dollars.

Our operating expense in 1962 was the lowest in history, amounting to 7.2% of income.

Income from membership fees increased from $19,303,696 in 1961 to $23,192,565 in 1962.

Emphasis during the year continued to be placed upon broader benefits, and as a result of this sales effort 51% of our membership is now enrolled under the preferred or special programs. Some 93% now have in-hospital medical benefits, and 60% of all account members now have the $50, $75 or $100 diagnostic x-ray and pathology endorsements. During the year, 65 accounts broadened their coverage to include some type of extended benefits.

Blue Cross also had one of the best years ever. In 1962, $54,549,232 was paid out for 314,931 hospital cases. Of this total, 101,692 were out-patient cases not requiring bed care. Blue Cross membership was 1,547,876 at the end of the year.

Blue Cross operating expense was only 4.5% of income for the year, the lowest ever, and income totaled $62,514,965, the highest ever.

During the successful 1962 open enrollment campaign, 4,260 more Hoosiers 65 and over enrolled in Blue Cross-Blue Shield. Of this total, 1,777 were 75 and over. Today more than 150,000 persons 65 and over are voluntarily enjoying the security of membership in the Indiana plans. This represents more than 35% of the state's 65 and over eligible population, excluding 43,000 who are in institutions or who are receiving Old Age Assistance.

Since organization, Blue Cross in 1944 and Blue Shield in 1946, the two Indiana plans have paid out a grand total of more than one half billion dollars in helping the people of Indiana solve their own health care financing problems. ◄

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Public Relations Division

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REFER TO PDR

Poythress, White Section, Page 808 (1963 edition) and Product Identification Section

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National Registry of Deaths from Mycetism Requests Notice of Deaths

The National Registry of Deaths from Mycetism maintains a file of deaths attributed to ingestion of wild mushrooms (1957 to the present).

Physicians are requested to send notice of all such deaths (age, sex, date, locality) to the undersigned.

Robert W. Buck, M.D., Secretary
Massachusetts Medical Society
22 The Fenway, Boston 15.

Dr. Anthony S. Ridolfo, Indianapolis, has been advanced to the post of senior physician in the clinical research division of Eli Lilly and Company. He has recently been studying the use of topical and systemic steroids in arthritis and dermatitis.

National Foundation for Eye Care Offers $250 Cash Award for Article

A cash award of $250 will be given by the National Medical Foundation for Eye Care to the author of an article written for laymen and published in a newspaper or magazine of national circulation prior to August 31, 1963. Further particulars may be obtained by writing the foundation at 250 W. 57th St., New York, 19.

Dr. William R. Kirtley, Indianapolis, has been promoted to assistant director of clinical research at Eli Lilly and Company. He has been head of the clinical medicine department since 1961, and before that was a senior physician.

Dr. John M. Tondra, Indianapolis, has been installed as president of the Ohio Valley Plastic Surgery Society. He was installed in ceremonies in Pittsburgh.

Eli Lilly and Company Pledges $100,000 to AMA-ERF Student Loan

A total of $100,000 has been pledged to the student loan guarantee fund of the AMA-ERF by Eli Lilly and Company.

The pharmaceutical firm made a $25,000 contribution to the fund for 1963, and pledged similar gifts for each of the next three years.

Dr. William D. Snively, Jr., of Mead Johnson and Company, Evansville, has been re-elected trustee of the Society for Academic Achievement. Dr. Snively also was



DR. OTIS R. BOWEN, left, of Bremen, Chairmon of the Public Health Committee of the House, ond Dr. Jomes R. Kirtley, of Crawfordsville, o member of the Stote Senote, look on os Governor Welsh signs Senote Bill 229 which permits physicions to serve os members of four-member county hospitol boords. The meosure, in effect, repeols on old 1917 low which hod prohibited physicions from serving os such members. The measure, strongly bocked by the ISMA Commission on Legislotion, wos steered through both houses of the General Assembly by Drs. Bowen and Kirtley. It thus is now possible for physicians to serve as members of hospitol boords under oll lows of the state.

named president-elect of the American Medical Writers' Association recently.

Dr. Hedwig S. Kuhn, Hammond, participated as an instructor at the 48th annual meeting of the Industrial Medical Association in Washington, D.C. recently. Dr. Kuhn conducted a course on "Ophthalmology in Industry." Nearly 2,000 physicians and nurses attended the four-day meeting.

Smith Kline & French Laboratories Award Fellowship to Indiana Student

Mary J. Yoder, of Goshen, Indiana, a junior at Indiana University School of Medicine is one of thirty-one medical students to be awarded a fellowship this year by Smith Kline & French Laboratories.

The grant enables each of the students to spend from ten to twelve weeks in mission hospitals or other outpost medical facilities in South America, Africa or India. Miss Yoder will visit and work in Nepal.

American Geriatrics Society Will Continue Lederle Residency Supplements

The American Geriatrics Society will continue its program of Lederle Residency Supplements during the residency year July 1, 1963 to July 1, 1964. There will be three grants of $1,800 each made possible by Lederle Laboratories and awarded to residents in augmentation of their salaries to encourage them in the study of medical problems of the aged.

Applications should be addressed to the society at 10 Columbus Circle, New York City, 19. Deadline is May 20.

Victor C. Hackney, M.D., has been named clinical director of Marion County General Hospital's Dermatology department.

A graduate of Yale University Medical School, Dr. Hackney took his dermatology residency at General Hospital. He was affiliated with Eli Lilly and Company and was in private practice in California before this new appointment. Dr. Hackney succeeds the late Dr. John Dalton.

David E. Brown, M.D. was named to succeed Dr. Marlow W. Manion as head of the department of Otorhinolaryngology and Bronchoesophagology at the Indiana University School of Medicine.

Dr. Brown has been a member of the faculty of I.U. School of Medicine since 1944 and is a graduate of Stanford University.

Dr. Manion who has headed the department since 1952, will remain on the faculty as professor of otolaryngology. ◄

FUTURE MEETINGS, SEMINARS, COURSES

American Cancer Society Offers 1963 Scientific Session in New York

The 1963 Scientific Session of the American Cancer Society will be a Conference on Unusual Forms and Aspects of Cancer in Man and will be held at the Biltmore Hotel in New York City October 21 and 22, 1963.

Indiana State Association of Medical Assistants Will Hold Seventh Convention

The seventh annual state convention of the Indiana State Association of Medical Assistants will be held at the Claypool Hotel in Indianapolis April 26, 27 and 28.

The Marion County medical assistants will be the hosts. The theme of the convention will be "Crossroads of Hoosierland."

Marion County General Hospital Will Present Final Postgrad Course

Marion County General Hospital will present its final postgraduate course for this academic year on April 24. The course will be on "Non-tuberculous Problems of Pulmonary Medicine." The course director will be John Miller, M.D. The course discussants will include a number of physicians from various parts of the country who are specialists in their fields.

The course is approved for 8 hours of Category II credit by the American Academy of General Practice.

ISMA Invited to Pathologists' Annual Seminar at Indianapolis

The Indiana Association of Pathologists is presenting its 15th annual seminar in cosponsorship with the U. S. Veterans Administration Hospital May 19 this year.

Subject will be Medical Diseases of the Kidney, presented by Dr. Paul Kimmelstiel. The meeting will begin at 10 a.m. (C.D.T.) at the Veterans Administration Hospital Auditorium, 1481 West 10th Street, Indianapolis.

A number of slide sets and protocols are available for pathologists who are not members of the Indiana Association of Pathologists who wish to attend. The available sets will be issued to those who apply, in the order of receipt of their applications. A check for $10.00 made out to the Indiana Association of Pathologists, together with the request for the set, should be sent to: Dr. Frank Vellios, Indiana University Medical Center, 1100 W. Michigan, Indianapolis, Indiana.

All members of the medical profession are cordially invited to attend whether or not they obtain the study sets.

Ob-Gyn American Board Oral and Clinical Exams Set for April 29-May 4 in Chicago

The next oral and clinical examinations (Part II) for all scheduled candidates are being held at the Edgewater Beach Hotel, Chicago, by the entire Board, April 29 through May 4, 1963.

New and reopened applications, and requests for re-examination in 1964 will be accepted in the office of the Executive Secretary on or before July 1, 1963. New applicants, re-opened candidates, and *all re-examinees* are required to submit a duplicate list of hospital dismissals for the preceding twelve months. Requests for re-opening and re-examination will not be accepted without duplicate current dismissal lists.

Current bulletins outlining present requirements, and application forms may be obtained by writing to the Executive Secretary's office, 2105 Adelbert Rd., Cleveland 6.

Refresher Course in Diagnostic Roentgenology Offered Radiologists

The fifth annual refresher course in Diagnostic Roentgenology will be held June 17-21 by the Radiology Department of the University of Cincinnati College of Medicine.

Further information may be obtained by

Continued



in arthritis: vitamins <u>are</u> therapy

In dealing with the chronic stress of arthritis the physician often faces the problem of nutritional imbalance. High potency B and C supplementation is needed for rapid replenishment of tissue stores of these water-soluble vitamins. STRESSCAPS meet this need and help support the natural metabolic defenses in the disease. Supplied in decorative "reminder" jars of 30 and 100.

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Vitamin B_2 (Riboflavin)	10 mg.
Niacinamide	100 mg.
Vitamin C (Ascorbic Acid)	300 mg.
Vitamin B_6 (Pyridoxine HCl)	2 mg.
Vitamin B_{12} Crystalline	4 mcgm.
Calcium Pantothenate	20 mg.

Recommended intake: Adults, 1 capsule daily, or as directed by physician, for the treatment of vitamin deficiencies.

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writing Dr. Jerome F. Wiot, Department of Radiology, Cincinnati General Hospital, Cincinnati 29, Ohio. The course is open to radiologists and radiology residents.

Abstracts of Papers Due May 15 For 1963 AHA Scientific Sessions

The 1963 annual meeting and scientific sessions of the American Heart Association will be held in Los Angeles, October 25-29. The three-day scientific sessions are scheduled from Friday, October 25, through Sunday, October 27, at the Biltmore.

May 15, 1963, is the deadline for submitting abstracts of papers to be presented at the scientific sessions. Papers must be based on original studies in, or related to, cardiovascular disease. Forms for submitting abstracts may be obtained from Richard E. Hurley, M.D., Medical Associate, American Heart Association, 44 East 23rd St., New York 10.

Registration fee for the scientific program is $15 for all those who are not members of heart associations or of AHA councils. Also excluded from payment of the fee are medical students, house officers, research fellows, graduate students and members of the U. S. Armed Forces.

Applications for scientific exhibit space are also available from Dr. Hurley. These must be returned no later than May 15, 1963. Requests for industrial exhibit space may be made through Steven K. Herlitz, Inc., 280 Madison Avenue, New York 16.

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University of Kentucky Medical Center Sets Clinical Cardiology Course

The University of Kentucky Medical Center announces a course in Recent Advances in Clinical Cardiology to be given at the College of Medicine in Lexington, Kentucky on May 9-10-11. This will be a two and a half day course with exercises in electrocardiography and phonocardiography, lectures, problem case presentations, panel discussions and CPC's. The fee is $15.00 for the two and a half day course.

Information and registration may be obtained by writing to Nicholas J. Pisacano, M.D., Director, Continuation Medical Education, University of Kentucky Medical Center, Lexington, Kentucky.

Indiana Public Health Association Will Hold Two-Day Annual Meeting

"Putting the Public Health Puzzle Together" will be the theme of the 17th annual meeting of the Indiana Public Health Association, to be held April 24 and 25 in Indianapolis.

Attending the two-day meeting, which will include the annual conference of the Indiana Health Officers' Association, will be state health officials and voluntary agency representatives, interested physicians, national officials from Washington, D.C. and volunteers from the lay public.

Following a 9:30 a.m. registration April 24 in the lobby of the Hotel Washington, members of the organization will tour the new City-County Building, where the first general session will begin at 1 p.m. in the auditorium.

Section meetings, a Board of Directors' luncheon, a tuberculosis seminar and individual group sessions will dominate the rest of the two-day conclave. ◄

INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—February, 1963

Disease	Feb. 1963	Jan. 1963	Dec. 1962	Feb. 1962	Feb. 1961
Animal Bites	293	235	397	342	334
Chickenpox	1054	1132	754	593	897
Conjunctivitis	86	67	103	141	150
Diphtheria	1	0	1	1	0
Dysentery, Unspecified	219	533	65	86	94
Impetigo	96	67	88	111	88
Infectious Hepatitis	163	41	71	136	234
Infectious Mononucleosis	44	26	21	50	14
Influenza	12591	1314	1329	9752	495
Measles (Rubeola-Rubella)	686	654	234	755	835
Meningitis, Meningococcal	3	9	2	4	2
Meningitis, Other	5	4	12	16	2
Mumps	408	503	153	511	469
Pertussis	63	49	68	7	9
Pneumonia	316	245	167	263	237
Poliomyelitis	0	0	3	1	0
Streptococcal Infections	993	642	436	727	874
Tinea Capitis	10	28	33	36	27
Tuberculosis (Active)	85	118	96	135	Not Available



We're sure you recognize the phraseology of W. Shakespeare, even though he was talking about names at the time, not insignia. "What's in a name?" he asked. "That which we call a rose, by any other name would smell as sweet."
We beg to disagree with Mr. Shakespeare. Perhaps it's because since we've been building

AN INSIGNIA BY ANY OTHER NAME

and maintaining the White-Haines reputation — as symbolized by the insignia above — that we feel a natural reluctance toward accepting the idea that just any other name would "smell as sweet."
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What's in a name? All those things and one more . . . a resolve to keep fulfilling your orders and our responsibilities through future generations. *That's what has made the White-Haines insignia the respected symbol it is today.*

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Deaths

Ara C. Badders, M.D.

Dr. Ara C. Badders, 72, retired Portland physician, died Feb. 1 in the Jay County Hospital.

A native of Portland and a 1913 graduate of the Indiana University Medical School, Dr. Badders practiced in Onward until he entered the medical corps in World War I. Following the war, he opened his practice in Portland. A Senior Member of ISMA, Dr. Badders retired last year because of ill health. He was a member of the Jay County Medical Society.

Colin V. Dunbar, M.D.

Dr. Colin V. Dunbar, Indianapolis general practitioner for more than a half-century, died Feb. 21 in St. Vincent's Hospital.

Dr. Dunbar, 80, was made a member of the ISMA 50-Year-Club in 1956. He was a 1906 graduate of the former Indiana Medical College and was one of the first visiting doctors in the Indianapolis Public School system. During World War I, he was credited with organizing a series of voluntary baby clinics to help relieve the physician shortage of that time.

George E. Lowrey, M.D.

Dr. George E. Lowrey, acting medical director at the Muscatatuck State School at Butlerville, died Feb. 19 in his home.

Dr. Lowrey had been on the staff of the school for mentally retarded children for 18 months. He formerly was on the staff of Newcastle State Hospital and in private practice at Harrodsburg, Ky.

The 54-year-old physician was a member of the Henry County Medical Society from 1959-1961. He then transferred his membership to the Jackson-Jennings County Medical Society. ◄

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GEORGE T. HARDING, Jr., M.D.
JAMES L. HAGLE, M.B.A.
Administrator
GRACE M. COLLET, Ph.D.
VERNON W. SHAFER, Ph.D.
Clinical Psychologists

MARY JANE McCONAUGHEY, M.S.W
CHARLOTTE M. BERG, M.S.W.
Psychiatric Social Workers
PAULINE L. TOOILL, R.R.L.
Medical Record Librarian
ESTHER L. SIMPSON, R.N.
Director of Nurses
SHARON LaDOW, B.S., O.T.R.
Occupational Therapist
JAMES MYERS, B.S., M.Ed.
Recreational Therapist

Phone: Columbus TUXEDO 5-5381

County, District News

Allen

The Allen County Medical Society met March 5 to hear Dr. Felix Wroblewski speak on the "Current Status of Diagnostic Use of Enzymes." There were 70 members present at the meeting.

Boone

Dr. Donald W. Boyer spoke on "Disaster Medicine" before the Feb. 5 meeting of the Boone County Medical Society. Thirteen members attended.

Cass

"Ophthalmology in the Far East" was the topic of Dr. Francis Parker when he spoke before the March 4 meeting of the Cass County Medical Society. Dr. Jay King has been elected president of the county society for the coming year. Assisting him will be Drs. Clarence M. Cobb, secretary-treasurer; Earl Bailey, delegate and Donald Winter, alternate.

Clinton

Thirteen members of the Clinton County Medical Society met Feb. 26 at the Clinton County Hospital. The group appointed a physician to work with the school nurse as a consultant in matters pertaining to the relationship of the school nurse, patients and doctors in the community.

Dearborn-Ohio

Dr. George D. Griffin discussed "Treatment of Peptic Ulcers by Gastric Freezing" with the 14 members of the Dearborn-Ohio County Medical Society Feb. 14. Dr. James M. Pfeifer gave a report on the Presidents and Secretaries meeting held in Indianapolis Feb. 10.

Dubois

Mrs. Karen Craig, county health nurse, spoke on the "Value of T.B.C. Tests in School Age Children" Feb. 14 at the Dubois County Medical Society meeting. The group voted to approve county-wide school Mantoux tests. Dr. Harry Craig has been elected president of the county society. Other newly elected officers are Dr. Jack D. Bland, Holland, secretary-treasurer; Dr. John H. Barrow, delegate and Dr. Edward Ploetner, alternate.

Elkhart

Dr. Manuel Lichtenstein spoke before the Elkhart County Medical Society meeting March 7. His topic was "Blunt Injuries to the Abdomen."

Floyd

"The Neurological Examination—Part I" was the topic of Dr. H. Lester Reed when he spoke before the Feb. 8 meeting of the Floyd County Medical Society. Part II of the talk was to be presented at the March meeting.

Jefferson-Switzerland

Dr. Wallace Childs spoke before 14 members of the Jefferson-Switzerland County Medical Society present at the March 5 meeting. His topic was "Radiological Examination of the Breast."

Lake

Dr. Karl Klicka, director of the Chicago Metropolitan Area Hospital Planning Council, was the principal speaker at the Feb. 13 meeting of the Lake County Medical Society. He discussed the Lake County hospital expansion program with the 125 members present.

Lawrence

Dr. William Noe, Bedford, has been elected president of the Lawrence County Medical Society. Dr. G. E. Kasting will serve as secretary-treasurer.

Marshall

Dr. Louring W. Vore, Plymouth, is the newly elected president of the Marshall County Medical Society. Dr. Kent Guild will serve as secretary-treasurer; Dr. Russell Hippensteel, delegate and Dr. Don Reed, alternate.

Owen-Monroe

Miss Jane Pierson, R.N., spoke on "Public Health Nursing in Monroe County" Feb. 28 at the Owen-Monroe County Medical

Society meeting. There were 31 members present at the meeting.

Porter

Dr. J. C. Brown, Valparaiso, is the new president of the Porter County Medical Society. The new secretary-treasurer is Dr. Robert Lee, also of Valparaiso.

Putnam

Newly elected president of the Putnam County Medical Society is Dr. D. J. Steele, Greencastle. Dr. Lawrence Jones will serve as secretary-treasurer.

Randolph

The Randolph County Medical Society has chosen Dr. C. R. Chambers as its new president. Dr. B. D. Wagoner will serve as vice-president and Dr. P. J. Birum, secretary-treasurer.

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Shelby

Mrs. Vivian Rowe, director of the Shelby County Department of Public Welfare, spoke before the Shelby County Medical Society meeting Feb. 6. A question and answer period followed concerning welfare regulations.

Tipton

Dr. W. A. Kurtz is the newly elected president of the Tipton County Medical Society. Vice-president is Dr. Raymond Kincaid and Dr. Robert L. Haller was re-elected secretary-treasurer.

Warrick

Warrick County Medical Society has elected Dr. Arthur Radziewicz as its president for 1963. Other new officers are Dr. Robert H. Terry, secretary-treasurer; Dr. W. C. Stover, delegate and Dr. Robert C. Colvin, alternate.

Whitley

Dr. Warren Niccum was the principal speaker at the Feb. 12 meeting of the Whitley County Medical Society. A movie entitled "If These Were Your Children" was shown to the 14 members present. ◄

Pop Goes the Pool

A contractor had just built a swimming pool in a customer's back yard when the drying concrete suddenly began erupting with small explosions. The whole job had to be redone, and a claim was submitted to the contractor's liability insurer for the expense involved.

An insurance claimsman traced the concrete to a ready-mix concrete firm and began checking out the ingredients one by one. The mystery of the exploding swimming pool was solved when he discovered that a farmer who provided the sand had delivered a load of popcorn earlier in the day.

He had neglected to clean out his truck before loading the sand, and the hot summer sun had popped the corn in the concrete. The insurer paid for renovating the swimming pool, the farmer reimbursed the insurer, and the farmer's own insurance company presumably picked up the tab for his "corny" negligence. . . .—*The Journal of American Insurance*, February, 1963.

Association News

THE COUNCIL

January 20, 1963

The Council of the Indiana State Medical Association convened for its January meeting at 10:00 a.m., Sunday, January 20, 1963, in the headquarters office building, 3935 North Meridian Street, Indianapolis, with Dr. Kenneth O. Neumann, chairman, presiding.

Roll call showed the following present:

Councilors:

First District—P. J. V. Corcoran, Evansville
Gilbert M. Wilhelmus, Evansville, alternate
Second District—E. T. Edwards, Vincennes
Philip T. Holland, Bloomington, alternate
Third District—John M. Paris, New Albany (also AMA alternate delegate)
Fourth District—Joe M. Black, Seymour
Fifth District—Not represented
Sixth District—William R. Tindall, Shelbyville
Seventh District—Albert M. Donato, Indianapolis
Eighth District—Not represented
Ninth District—Kenneth O. Neumann, Lafayette
Tenth District—Lowell H. Steen, Whiting
Eleventh District—E. S. Rifner, VanBuren
Twelfth District—Milton F. Popp, Fort Wayne
William Clark, Fort Wayne, alternate
Thirteenth District—Not represented

Officers:

Maurice E. Glock, Fort Wayne, president
Don E. Wood, Indianapolis, president-elect
Irvin W. Wilkens, Indianapolis, treasurer
Ottis N. Olvey, Indianapolis, assistant treasurer

Journal:

Frank B. Ramsey, Indianapolis, editor

Executive Committee:

Wendell E. Covalt, Muncie, chairman
Ralph V. Everly, Indianapolis, member

Guests:

Harold C. Ochsner, Indianapolis, AMA delegate
Jack E. Shields, Brownstown, AMA delegate
James H. Gosman, Indianapolis, AMA alternate delegate
Robert M. Brown, Marion, AMA alternate delegate
William B. Challman, Mount Vernon, AMA alternate delegate
Elvis J. Stahr, jr., president, Indiana University
John D. Van Nuys, Indianapolis, dean, I. U. School of Medicine
George T. Lukemeyer, I. U. School of Medicine
A. C. Offutt, Indianapolis, State Health Commissioner
Glen Ward Lee, Richmond, Commission on Governmental Medical Services
Lester D. Bibler, Indianapolis, chairman, Student Loan Committee
Lloyd Banks and Richard Kilborn, Blue Cross-Blue Shield
Robert H. Rang, Washington
Robert Yoho, Indianapolis, State Board of Health

Staff:

Robert Hollowell, attorney
Robert J. Amick, field secretary
Howard Grindstaff, field secretary
J. E. Palmer, administrative assistant
J. A. Waggener, executive secretary

On motion of Drs. Edwards and Tindall, minutes of the meetings held October 7 and 10, 1962, at French Lick, were approved as printed in the December 1962, Journal.

It was taken by consent that the chairman should continue in the chair in case he wishes to enter into any of the discussion during the Council meeting.

The chairman announced that he had appointed various Council committees, and on motion duly made and seconded these appointments were approved.

Reports of Councilors

District meetings were reported scheduled as follows during 1963:

First District—Evansville, May 9, 1963
Second District—Bloomington, June 5, 1963
Third District—Bedford, May 22, 1963
Fourth District—Aurora, 2nd or 3rd Wednesday in May, 1963
Fifth District — Cataract Lake, September 25, 1963
Sixth District—Richmond, May 16, 1963
Seventh District—Martinsville, May 1, 1963
Eighth District—Portland, June 5, 1963
Ninth District—Lebanon, May 15, 1963
Tenth District—....., May 8, 1963
Eleventh District—Delphi, May 22, 1963
Twelfth District—Fort Wayne, May 22, 1963
Thirteenth District—Elkhart, September 18, 1963

Attention of the councilors was called to the fact that programs for district meetings should be sent to the headquarters office 45 days in advance of district meetings to allow time for distribution to all district members 30 days prior to district meetings.

Reports of Officers

DR. MAURICE E. GLOCK, president: I'd like to say that I've been real impressed with the work of most of the commissions. The meetings are pretty well attended, and I'm real proud of the men who are doing this work. I have found out that at least the basic work of this organization is done in these commissions and I want to commend these people for coming in on their Sundays and doing the work that they have been doing.

I had an opportunity—representing the association—to slum it up out at Colorado Springs for three or four days at your expense and I enjoyed it very much. Thanks. This was a conference of the American medical colleges with practicing physicians. They picked out the presidents of the various state associations and some other people from medical education committees—the AMA par-

ticipated—and we had a little brainwashing on the relationship of the medical schools to the practicing physician. And I felt like I wasted my time a little bit after getting the Kindall report which a lot of you will read—it's a very thick book—a survey that was done by a sociologist from the East regarding the relationship of the practicing physician to the medical school. I came back feeling real proud that I am from the Midwest—I got the distinct feeling that the people from the east coast depend and look to the Federal Government for solution of their problems. There is a lot of antagonism between the medical profession and the schools in the East and I don't think we can be real smug here but I think we have pretty good relations. I think that we should activate—which Kenny has done—the liaison committee with the medical school. At any rate, I enjoyed it and will try to help the liaison committee with some of the things that we got from this meeting.

I don't see Glen Ward Lee here—he wrote me a letter. As you know, the AMA is pushing this mental health steering committee business and this is a big effort on the part of the AMA. We are trying to make it a big effort on the part of the state association affairs. Glen Ward is doing an excellent job in running this steering committee—trying to give leadership from the state association in proposed mental health programs.

Glen Ward has spent some funds from his commission on this—they don't have enough equipment—and this steering committee has met and have asked for $1,500 from various components—$500 from the state medical—$500 from the Indiana Mental Health Association, and $500 from the treasuries of the Northern Indiana and Indiana District branches of the American Psychiatric Association.

He is to come before you to request this $500. I don't know if he is to be here today or not. If he is not here, then I'll pass on his request to you for the sum of $500. We're making a big issue of this. We're having this conference on February 20th and it's the first Indiana Congress on Mental Health that we have sponsored. We're going into this and if we're going to follow up what the AMA recommends—I feel that we're almost obligated to dig up a portion of this money.

I don't want to steal any of Don Wood's thunder—he's going to give you a report on legislation. I do want to say that I am very pleased with the Commission on Legislation—the work that Don and Mr. Hollowell are doing on trying to implement Kerr-Mills in Indiana. We have taken the position—both nationally and through our state association—as being in favor of Kerr-Mills type legislation. I don't think we can go back to them and ask them to support us in our aims and our desires—the way we feel that things should go—if we don't show evidence of good faith. I think it's up to all of us to get behind them and demonstrate an effort to show that we are acting in good faith.

I'd like to briefly mention—you've all gotten the correspondence on it—this Conference on County Medical Society Officers on Sunday, February the 10th. I think this is extremely important and I feel that we possibly should not only be there but we should make a definite effort to contact the county society officers in our districts and be sure that we get a good promotion on this and get people there. The same applies to the meeting February 20th, at the Claypool Hotel, of the Congress on Mental Health. We're going to have an address by Governor Welsh. We're going to have a keynote address by Dr. Annis, which I think is in itself worth making an effort to attend. This man always has good comments to make and he can certainly bring to us the feeling of the AMA regarding this activity. Annis has also been invited to address both houses of the legislature that day. I think it's a big day and I know that these meetings come pretty close together but I'd like to urge all of you not only to participate but to go back into your districts and sell these programs in your district. Thank you.

DR. DON E. WOOD, president-elect, discussed the active legislative program in which the American Medical Association has been and is engaged nationally.

DR. WOOD: The medical profession is continuing to support the idea and the philosophy of the Kerr-Mills bill, because this is a program which will help those who need help, and it is locally administered. . . . We recognize that there are some things that need to be changed. So your Council on Legislative Activities and the AMA and the Board of Trustees have recommended four amendments to be introduced in this present session of the Congress, referring principally to the Kerr-Mills law.

This is one—to remove the requirement that both these programs of OAA and MAA be administered by the same agency, which is the present situation. We want to change that. The second one is to provide flexibility in the administration of the income limitations proposed under the law so that persons who experience a major illness may qualify.

In other words, in Indiana, as you know, under Old Age Assistance, for example, as it now stands, the individual can have no more than $350 in liquid assets. This is putting them really down to almost the state of pauperization—and I hesitate to use that word, but this is true. Now include a provision—this is another amendment—to put a provision in the law requiring state administering agencies to seek expert advice from physicians or medical societies through their advisory committee. When I tell you what we have done in our local legislature you'll find out that we have utilized this particular provision that we're going to try and make an amendment in the national program. The last one is to provide for free choice of hospital and doctor under the state program.

Now then, you say this is fine, but what else does this do? This allows another facet of the program that's most important to many of the

medical societies that I listened to last weekend who had criticism to make of the AMA's program. They want it to be an insurance program at the local level. Well, this is a state option.

They have introduced a series of legislative proposals to the Congress: one, to recommend that the Internal Revenue Code be amended to permit a taxpayer to deduct in full the amounts paid for medical care of any person who has reached 65 and is within the named group of persons defined as dependents under the law. Now this, I think, you would all recognize as being an important amendment that would help reduce the tax burden on these people.

The next thing is the removal of 1% drug limitations and the inclusion of drugs as medical expense . . . for this same category of people. Another is to permit the taxpayer over age 65 to receive full tax benefits for medical expenses by use of the carry-forward and carry-backward principle. In other words, when you have a dependent and you as a son or daughter are paying the bill, the amount of money that you pay in or the amount of money that the individual has to pay in can be applied onto the next tax period rather than the Federal Government owing you money.

The next thing is to provide a tax credit for medical expense paid by those over 65 proportionate to the relation of the taxpayer's medical expense to his taxable income. This is a sliding scale proposal—the advantages lie in that—it is a more equitable approach to the problem that finally would result in a greater tax savings for the lower income groups. The greater the medical expense, the lower the income tax liability—the greater will be the savings.

So we do have a program, and we are presenting it to the Congress, and we are doing something in relation to what the doctors who constitute the AMA, desire to be done.

Now we'd like also to call to your attention to the last Congress in which there were 624 bills submitted which pertained to medicine as a whole. Thirty-two of these bills have become law—and they go from every aspect of the problem of medical care throughout the United States—from veterans' care, civil defense, veterans' affairs—all the way down through the line. All these bills are studied and recommendations made to the Board of Trustees as to what medicine did or does in this particular thing in a constructive way.

I would like also to call to your attention that the AMA makes statements as regards policy, and it seems to me that you should know what these policy statements are that we make in the field of legislation. One, we make it in the field of automotive safety, in which we have been, as a state, interested—in seat belts, for example. We have appeared and made a policy statement in two instances in this field. We have the same old problem at the national level with chiropractors.

The chiropractors want to take care of federal employees—we have opposed that, obviously. In civil defense, we favor appropriation for civil defense shelters, which you would also favor. In drugs, we have opposed the provisions relating to the efficiency drug nomenclature—information to physicians—the factory inspection and special control of barbiturates and stimulant drugs, which the Federal Government wanted to do. We opposed also the prescription drug advertising bill.

So here we have automotive safety, chiropractors, civil defense, drugs, education. We favored medical school construction programs.

We also opposed those things that had to do with Federal insurance provisions and this, of course, is the King-Anderson Bill. We opposed the reorganization which called for adding two new assistants to the HEW.

Public assistance. We favored states unified assistance program. We opposed the determination of blindness by optometrists.

Public health. We favored the vaccination assistance program. We favored the retirement program in which tax deduction for the self-employed retirement plan would be possible. This is HR 10, the Keogh Bill. They made many informal statements in very many other fields that were, I feel, most important so far as the practice of medicine is concerned.

Well, now how does all this affect us in Indiana? I think we in Indiana are interested in care for the aged regardless of what it costs . . . we will all continue to do that. But if we can implement a program that will take care of the needy aged, this is what we want to do. And so, through a series of circumstances, we were able to make contact with our legislators and get their consent that we should write a bill. Our attorney, with the help of Mr. Waggener and the cooperation of the AMA who sent people down here, has written a bill that will implement Kerr-Mills in Indiana. This is under the MAA program. This is one of the things that I want to explain to you because you are going to be asked about this and you're going to be contacted about it, and I'm sure it is going to be in the papers.

At the present time we do not have Kerr-Mills. What we have is the public welfare program and the Old Age Assistance part of that program—in which we have a fourth category of care for the medically indigent—those who do not need food, clothing or shelter. But the limitation in this particular program for these people is that they may have only $350, which is the defined amount to bury an individual. We felt by philosophy this pauperizes the individual, rather than allowing them to stand on their own two feet. In other words we felt that we were requiring them to become wards of the state permanently by limiting them to $350 in liquid assets. And so it was on this point of philosophy that we sold the matching part of Kerr-Mills.

So this brings us down to the next part of the thing that I would like to talk to you about, the program of AMPAC. Now AMPAC, as you know,

is the national program, the political arm of the Council on Legislative Activities. The council is still responsible for policy and for suggestions as to what should be done by the AMA. The political action group is the one responsible basically for the election of people who are going to carry out these ideas. In other words, our basic responsibility at the moment is an educational program in which we will try to inform those people who are not familiar with our particular political set-up in the United States.

We also have a program of instruction in the realm of basic issues so that they will know that, and also a fund-raising program which will be brought to bear from now until the next election in 1964. This is the function of AMPAC; it is to do the job of electing people who will carry out the policies of the AMA. And this has to be done in the primaries that are to come. What was the response of AMPAC in the last general election? I think you should know this. We were 70% effective in the election of the candidates that we supported.

Now we could easily have been 100% effective by supporting only those candidates that we knew were going to win the election. But this would not change the complexion of the Congress and so we also participated in races which were in marginal areas where the difference in the plurality was less than 5%. Many of these areas were COPE targets as well as targets relating to whether the individual should be a conservative or not. Our basic thought, first of all, was of course toward House Ways and Means which had fought our battle.

In this particular phase of the problem, I want you to know, just recently we have suffered somewhat of a setback there because the two gentlemen who were appointed to the House Ways and Means Committee are people who are not friendly to our particular philosophy and at the moment, as we count the heads, the situation stands at 13 to 12 . . . in which we have the one man advantage . . . this is a pretty narrow advantage in the House Ways and Means Committee.

But let me hasten to add this. Too often I hear that it is inevitable that this situation is going to take place, that we're going to have some form of socialized medicine. I don't believe that.

I think this is exactly what our foes would like for us to feel and I think the evidence to support that was that he could not mobilize this kind of public sentiment in the last Congress before they voted on it. And I don't think he can do it again with your continued cooperation and help and thought in the matter. But, coming on down now to the problem of AMPAC. What did we do? We supported 13 Democrats to 12 Republicans in the South and we were able to beat COPE in 25 of the 31 critical races . . . in which we participated. So I think, that a youthful organization such as AMPAC has contributed greatly to the stability of medicine's posture in the Congress at large.

THE CHAIRMAN announced that he had just received a telegram telling of the death on January 18 of Dr. Roscoe L. Sensenich, of South Bend, president of the Indiana State Medical Association in 1936.

DR. IRVIN W. WILKENS, treasurer, reported as follows: Mr. Chairman: Our financial picture at this time is somewhat better than reported at the last meeting. This is due primarily to the incoming dues for 1963. The bank balances of January 18, 1963, are as follows: General Fund $29,163.20; *Journal* Fund $27.89; Medical Defense Fund $675.34; Building Fund $610.00; Student Loan Fund $1,305.60.

I have instructed the Indiana National Bank to sell the $25,000.00 in bonds maturing in 1964 and the $20,000.00 in bonds maturing in 1966. These will be available for the General Fund in March of this year, as the procedure necessary causes the delay. The amount of interest that we lose in cashing in bonds prematurely is less than it would be if a like amount were borrowed from the bank. As you recall, the Council instructed me to do this whenever it was feasible. Our indebtedness at this time is as follows: balance to architect $716.73; balance to contractor $500.00; borrowed from General Fund $20,727.00; borrowed from Indiana National Bank $110,000.00.

As we remember, the House of Delegates stated that $150,000.00 could be borrowed as needed, so we are well within the total authorized.

We are obligated to pay $1,000 each month plus any other amount possible to the bank against the loan. We are also authorized to take out $18,000.00 from the General Fund to apply against the loan. As stated before, the incoming dues make the financial picture at this time quite secure. If we could get the $50.00 either in the form of a donation or a loan from the individual members we could have a total of $85,000.00 which would practically make us debt free.

The *Journal* loss to date is $4,097.50 but this will be recovered by the increase in subscription voted in the special session of the House of Delegates. The increase in cost of *The Journal* has been brought about by the added cost of printing and the loss of advertising fees.

This, I believe, is the general picture of our present financial state.

Dr. Wilkens presented the annual audit of Wolf and Company, certified public accountants, for the period from October 1, 1961, to September 30, 1962, which follows:

The Council
Indiana State Medical Association
Indianapolis, Indiana

Gentlemen:

We have examined the balance sheet of Indiana State Medical Association as of September 30, 1962, and the related statements of fund surplus and revenue and

expenditures for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statements of fund surplus and revenues and expenditures present fairly the position of Indiana State Medical Association at September 30, 1962, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Respectfully submitted,
Wolf and Company
Certified Public Accountants

Indianapolis, Indiana
October 24, 1962

INDIANA STATE MEDICAL ASSOCIATION

BALANCE SHEET

September 30, 1962

Exhibit A

ASSETS

General Fund:			
Cash		7,316.87	
Note receivable		550.96	
Inventory—tape recorders		269.94	
Deposits with postmaster		887.22	
Prepaid expenses		518.24	
Accrued interest receivable		1,217.88	
Receivable from other funds:			
The Journal	7,228.60		
Student loan fund	25,000.00		
Building fund	78,824.93	111,053.53	
Reimbursement due for Medicare expenses		6,646.28	
Investment in United States obligations at cost, less amortization (Note 1):			
Treasury bonds	67,274.82		
Treasury note	5,000.00		
Savings bonds	66,000.00		
	138,274.82		
Less accumulated amortization	205.15	138,069.67	
Office furniture and equipment:			
General office	21,109.49		
Medicare office	4,437.52		
	25,547.01		
Less accumulated depreciation	11,652.58	13,894.43	280,425.02
Building Fund:			
Cash		2,862.21	
Fixed assets, less accumulated depreciation:			
Building	291,221.11		
Office furniture and equipment	35,303.85		
	326,524.96		
Less accumulated depreciation	5,120.26	321,404.70	
Land		69,187.60	393,454.51
The Journal:			
Cash		319.53	
Accounts receivable:			
Advertising	7,191.79		
Other	123.32	7,315.11	
Postal deposit		203.09	
			7,837.73
(carried forward)			681,717.26
Medical Defense Fund:			
Cash		1,359.04	
Accrued interest receivable		238.91	
Due from general fund		3,000.04	
Investments in United States obligations at cost, less amortization:			
Treasury bonds	19,600.70		
Savings bonds	7,000.00		
	26,600.70		
Less accumulated amortization	433.70	26,167.00	30,764.99
Student Loan Fund:			
Cash		636.69	
Notes receivable		40,263.38	40,900.07
Medicare Fund:			
Cash		12,593.61	
Recoverable payments to doctors		47,406.39	
			60,000.00
			813,382.32

Notes:

1. General fund investments in United States obligations aggregating $62,000.00 have been allocated to the building fund.
2. General fund investments in United States obligations in the principal amount of $20,000.00 are held in escrow by the U. S. Government to secure funds advanced for the Medicare fund.

LIABILITIES AND FUND SURPLUS

General Fund		
Liabilities:		
Notes payable—bank	30,000.00	
Accounts payable	1,706.34	
Accrued expenses:		
Payroll taxes	1,810.03	
Interest on bank loan	176.72	
Payable to other funds:		
Medical defense fund	3,000.04	
American Medical Education Fund	37,120.00	
Deferred income:		
Exhibitors' deposits	10,643.75	
Unearned dues	45,626.20	
Deposits on tape recordings	339.00	
	130,422.08	
Fund surplus (Exhibit B)	150,002.94	
		280,425.02
Building Fund		
Liabilities:		
Accounts payable	26,394.16	
Interest accrued on bank loan	676.02	
Loans from members	24,275.00	

Notes payable—bank	35,000.00	
Payable ta general fund	78,824.93	
	165,170.11	
Fund surplus (Exhibit 8)	228,284.40	393,454.51
The Jaurnal		
Liabilities:		
Accaunts payable:		
Trade	9,835.74	
Emplayee payrall deductians	32.55	
Payable ta general fund	7,228.60	
	17,096.89	
Fund deficit (Exhibit B)	9,259.16	7,837.73
(carried farward)		681,717.26
Medical Defense Fund		
Fund surplus (Exhibit B)	30,764.99	
		30,764.99
Student Laan Fund		
Due ta general fund	25,000.00	
Fund surplus (Exhibit 8)	15,900.07	40,900.07
Medicare Fund		
Funds advanced by U. S. Gavernment (Nate 2)	60,000.00	
		60,000.00
		813,382.32

STATEMENT OF FUND SURPLUS

For the Year Ended September 30, 1962

Exhibit B

General fund:		
Balance, September 30, 1961		227,280.53
Excess af revenues aver expenditures (Exhibit C)	3,722.41	
Praceeds af matured bands transferred ta building fund	81,000.00	77,277.59
Balance, September 30, 1962		150,002.94
Building fund:		
Balance, September 30, 1961		114,516.40
Revenue:		
Dues allacated	18,557.50	
Danatians fram members	6,825.00	
Special danatians	8,061.52	
Praceeds fram matured bands transferred fram general fund	81,000.00	
	114,444.02	
Less interest accrued an bank laans	676.02	113,768.00
Balance, September 30,1962		228,284.40
The Jaurnal:		
Balance, September 30, 1961		10,151.04
Excess af expenditures aver revenues (Exhibit D)		19,410.20
Balance (deficit), September 30, 1962		(9,259.16)
Medical defense fund:		
Balance, September 30, 1961		30,250.06
Excess af revenues aver expenditures (Exhibit E)		514.93
Balance, September 30, 1962		30,764.99
Student laan fund:		
Balance, September 30, 1961		15,565.46
Interest earned		271.61
Danatians		63.00
Balance, September 30, 1962		15,900.07

STATEMENT OF REVENUES AND EXPENDITURES

Exhibit C

For the Year Ended September 30, 1962

GENERAL FUND

	Actual	Budget	Actual Over (Under) Budget
Revenues:			
Dues	188,300.30	183,200.00	5,100.30
Less dues allacated:			
The Jaurnal	11,322.00	11,472.00	(150.00)
Medical defense fund	4,670.15	4,780.00	(109.85)
American Medical Educatian Fund	37,120.00	36,240.00	880.00
Building fund	18,557.50	18,120.00	437.50
	71,669.65	70,612.00	1,057.65
Dues available far aperatians	116,630.65	112,588.00	4,042.65
Interest an investments	5,904.91	3,500.00	2,404.91
Received fram A.M.A.	1,248.47	1,000.00	248.47
Net incame—annual meeting	4,379.14	5,000.00	(620.86)
Other incame	4,336.00		4,336.00
Tatal revenues	132,499.17	122,088.00	10,411.17
Expenditures:			
Committees and commissians (Schedule C-1)	11,977.28	16,550.00	(4,572.72)
Officers and council (Schedule C-2)	11,789.47	18,400.00	(6,610.53)
Headquarters affice (Schedule C-3)	97,156.67	98,500.00	(1,343.33)
Waman's auxiliary	147.50	1,000.00	(852.50)
Danatians	270.00	500.00	(230.00)
Emplayes' retirement fund	7,435.84	7,200.00	235.84
Tatal expenditures	128,776.76	142,150.00	(13,373.24)
Excess af revenues aver expenditures (expenditures aver revenues)	3,722.41	(20,062.00)	23,784.41

STATEMENT OF OPERATING EXPENDITURES

Schedule C-1

For the Year Ended September 30, 1962

COMMITTEES AND COMMISSIONS

	Actual	Budget	Actual Over (Under) Budget
Standing committees:			
Grievance	101.78	500.00	(398.22)
Student laan	108.57	100.00	8.57
Medical legal review	26.49	50.00	(23.51)
Cammissians:			
Canstitutian and bylaws	138.05	200.00	(61.95)
Interprafessianal relatians		200.00	(200.00)
Legislatian	3,493.24	6,000.00	(2,506.76)
Public health	535.70	1,000.00	(464.30)
Public infarmatian	2,282.92	2,500.00	(217.08)
Special activities	588.48	500.00	88.48
Valuntary health agencies	658.49	900.00	(241.51)
Medical ecanamics and insurance	987.72	1,000.00	(12.28)
Medical education and licensure	686.43	1,000.00	(313.57)
Building	312.02	1,000.00	(687.98)
Gavernment medical services	1,178.30	600.00	578.30

Aging	879.09	1,000.00	(120.91)
Total	11,977.28	16,550.00	(4,572.72)

Schedule C-2

OFFICERS AND COUNCIL

	Actual	Budget	Actual Over (Under) Budget
President	512.70	1,500.00	(987.30)
President elect	10.00	500.00	(490.00)
Council chairman	200.95	300.00	(99.05)
A.M.A. delegates	4,047.18	7,750.00	(3,702.82)
A.M.A. meetings	2,512.92	2,500.00	12.92
Treasurer, auditing and accounting	1,210.00	1,500.00	(290.00)
Council travel	1,292.00	1,000.00	292.00
Council meetings	354.53	1,000.00	(645.47)
Better Business Bureau	150.00	150.00	
Chamber of Commerce	1,000.00	1,000.00	
Executive committee meetings	194.95	600.00	(405.05)
Executive committee travel	304.24	600.00	(295.76)
Total	11,789.47	18,400.00	(6,610.53)

Schedule C-3

HEADQUARTERS OFFICE

	Actual	Budget	Actual Over (Under) Budget
Salaries	55,711.49	61,700.00	(5,988.51)
Supplies	2,993.63	2,200.00	793.63
Telephone and telegraph	4,374.02	5,200.00	(825.98)
Postage	2,340.41	3,000.00	(659.59)
Printing and stationery	1,593.96	2,000.00	(406.04)
Travel	8,244.98	10,000.00	(1,755.02)
Rent and electricity	1,234.77	5,000.00	(3,765.23)
Organization memberships	482.60	400.00	82.60
Interest paid	176.72		176.72
Insurance:			
Hospitalization	1,003.80	900.00	103.80
Other	1,780.77	2,500.00	(719.23)
Extra help	596.15	500.00	96.15
Payroll taxes	1,638.08	1,500.00	138.08
Depreciation	6,595.76	2,200.00	4,395.76
Maintenance—office machines	502.79	400.00	102.79
Moving	1,445.26	500.00	945.26
Building operating expenses	4,312.35		4,312.35
Real estate taxes	329.80		329.80
Unallocated	1,799.33	500.00	1,299.33
Total	97,156.67	98,500.00	(1,343.33)

Exhibit D

STATEMENT OF REVENUES AND EXPENDITURES

For the Year Ended September 30, 1962

THE JOURNAL

	Actual	Budget	Actual Over (Under) Budget
Revenues:			
Subscriptions:			
Members	11,322.00	11,472.00	(150.00)
Nonmembers	610.00	350.00	260.00
Advertising	40,565.54	50,000.00	(9,434.46)
Other	5,645.63	1,500.00	4,145.63
Total revenues	58,143.17	63,322.00	(5,178.83)
Expenditures:			
Salaries (including extra help)	12,823.20	14,625.00	(1,801.80)
Office expense and postage	658.92	500.00	158.92
Printing and reprints	54,473.79	55,000.00	(526.21)
Engravings	3,350.14	5,000.00	(1,649.86)
Travel and meetings	1,500.00	1,800.00	(300.00)
Bulk mailing	1,153.43	1,100.00	53.43
Other publishing expense	537.75	600.00	(62.25)
Payroll taxes	433.45	500.00	(66.55)
Employe group insurance	122.37	140.00	(17.63)
Rent and electricity	2,156.07	2,200.00	(43.93)
Telephone and telegraph	222.82	300.00	(77.18)
Dues and memberships	4.00	50.00	(46.00)
Prizes	100.00	225.00	(125.00)
Unallocated	17.43	150.00	(132.57)
Total expenditures	77,553.37	82,190.00	(4,636.63)
Excess of expenditures over revenues	19,410.20	18,868.00	542.20

STATEMENT OF REVENUES AND EXPENDITURES

Exhibit E

For the Year Ended September 30, 1962

MEDICAL DEFENSE FUND

Revenues:		
Transfer of applicable portion of dues	4,670.15	
Interest earned—U. S. Treasury bonds	662.79	
Amortization of discount—U. S. Treasury bonds	13.25	
Total revenues		5,346.19
Expenditures:		
Legal fees	2,790.00	
Malpractice fees	2,032.15	
Stationery and printing	9.11	
Total expenditures		4,831.26
Excess of revenues over expenditures		514.93

Exhibit F

STUDENT LOAN FUND

Cash balance, September 30,1961		1,539.46
Revenues:		
Collection of student loans	4,752.84	
Interest earned	294.39	5,047.23
		6,586.69
Expenditures—loans to students		5,950.00
Cash balance, September 30, 1962		636.69

DR. FRANK B. RAMSEY, editor of *The Journal:* Our budget for this year is set up with anticipating, of course, the new subscription price, which takes effect the first of January. We just finished the last quarter of the old subscription price and therefore in that quarter were considerably in arrears, as Dr. Wilkens pointed out. The new budget was set up as realistically as we all could estimate, conservatively, and is on the basis of about a $2,000 deficit. This is set up with a fond hope—but of course without certainty—that economies as we go along and a slight expected improvement in advertising revenue would make the thing balance by the end of the year. Actually, our advertising revenues for this last quarter of '62 was 23%, whereas ideally it should have been 25% of the budget, and the printing bill, which is the biggest expense, was the same percentage, 23%, so it comes out exactly even.

Delegates to the AMA: DR. HAROLD C.

OCHSNER announced that Dr. Lester D. Bibler of Indianapolis would be nominated for membership on the AMA Board of Trustees at the June meeting of the AMA, and solicited the support of the Council.

Reports of Guests

Blue Cross—Blue Shield:

MR. RICHARD KILBORN, assistant executive vice-president of Blue Cross-Blue Shield, distributed a report on the annual Blue Cross-Blue Shield open enrollment campaign, held October 1 through October 8, 1962, which showed that 11,979 new members were enrolled during the campaign, 4,260 of whom were age 65 and over. "Today more than 150,000 Indiana senior citizens, representing 35% of the state's 65 and over eligible population, excluding 43,000 who are in institutions or are receiving Old Age Assistance, are enjoying the security of membership in Blue Cross-Blue Shield."

MR. LLOYD BANKS, enrollment director, reported on the activity of the Professional Health Care and Security Plan as approved by the Council a year ago:

We believe that the underwriting and enrollment regulations adopted by the Council one year ago have contributed significantly to the success of your account during this past year. . . . Currently some 2,042 physicians are participating in the account. Eighty-three percent of these physicians are carrying the professional health care plan; some 17% are carrying the professional health security plan, with 12 members choosing the $500 deductible, two the $750 deductible, and six the $1,000 deductible.

During the nine months of operation, only 24 members have cancelled. . . . You will recall that this account is jointly underwritten by Blue Cross-Blue Shield who have joined together in accepting the membership fees as a complete fund and expending them the same way. We keep your reserve status—not on one side of the ledger, but in one ledger—a joint Blue Cross-Blue Shield account. Looking at it from an actuarial viewpoint, we feel that this is the most adequate experience that has been accumulated over the past eight to nine months.

Mr. Banks presented an actuarial report for the period April 1, 1962, through November 30, 1962, showing an accumulated reserve over operating expenses for the eight-month period of $9,388.92.

MR. BANKS: Now if this were projected over another four month period—for the full calendar year—we anticipate a $4,500 reserve contribution in addition to what you see here. That gives us about a $13,500 position or very close to the $15,600 expected accumulation of reserve over a one-year period. It was on this basis that we agreed to continue the existing membership fee for the physicians for another year.

Now, the plan for '63, based upon the things that we have discussed to this point—or what we can anticipate during this year.

No. 1—We propose, subject to your approval, to have an open enrollment period in which we will offer another 2,000 physicians in this state an opportunity to join your account. We would like to do this in March so that the applicants might be effective April 1, 1963. We hope to do this without the confusion we had last year. We'll send one mailing this year, without the numerous letters following it. We propose to offer the members holding a deductible type of membership the opportunity to change either the level of deductible or to change if they wish to, to the health care plan (non-deductible). This will be their only opportunity to do these things this year.

We would like to make one recommendation—that the Council give us the authority to eliminate the $750 and $1,000 deductible offers. There are only eight persons participating in these two levels and it is administratively unsound and impractical to continue such an offer. We propose not to change the members that currently have these levels of coverage.

On motion of Drs. Paris and Edwards, the Council voted approval of the recommendation to eliminate the $750 and $1,000 deductible policies in the physicians' plan.

On motion duly made and seconded, the Council approved the continuation of the physicians' plan as it has been conducted during the past year, with the above mentioned single change.

DR. A. C. OFFUTT, State Health Commissioner, and DR. ROBERT YOHO of the State Board of Health, spoke on the proposed bill for the licensing and regulating of health facilities and care facilities in the state of Indiana by the Indiana State Board of Health through an Indiana Unified Health Care Council.

DR. OFFUTT: In the establishment of the organization of the Council, it was felt, of course, that there should be the usual representation from organized medicine, from the hospital groups and from the nursing home group and then some ex-officio membership from those agencies of state government that are involved—namely, the Department of Public Welfare, the State Board of Health and the Fire Marshal, and the Department of Mental Health. . . . And I have inadvertently skipped a very important thing. The hospital licensure program in Indiana has never included the mental hospitals. The unified licensure bill, if it becomes a law, will include the mental hospitals.

Also the group of homes for the alcoholics and the groups that are operated by the mental health, which have never been licensed, will also be licensed under this activity. In order to properly operate this organization proposed in the act, there is a central licensing council. Now this will be related to, as a matter of organization, the present hospital licensing council and the present nursing home licensing council. Both these councils have been, one related to the other, because the present nursing home act as it was drawn was in general copied from older hospital licensing law.

In order to properly operate this program, there would be some divisions which will be established under the overall council. Those divisions would be concerned with the specific groups licensed, plus one additional division which would be a general division, which may handle all these fields. The council is also given, as has been true in the nursing home act and the hospital licensure act, the right to promulgate regulations concerning the operation of the several types of institutions which it would be licensing.

Following discussion by Dr. Yoho, the secretary, and Dr. Offutt, it was taken by consent that if possible the provision that the two appointees from the State Medical Association "shall be doctors holding unlimited licenses to practice medicine and surgery" should be inserted in the bill.

Dr. Offutt also spoke on two bills regarding the control of tuberculosis which are being sponsored by the State Board of Health:

(1) A bill for the control of tuberculosis which amends the present Public Health Code to require a health officer, when he finds a communicable disease, to make an examination. There's nothing in the law now that says the individual who has the disease has to be examined. The bill has the usual escape hatch for the Christian Scientist—if a person relies on prayer for healing he doesn't have to have anything other than a chest x-ray.

(2) The second bill requires that clinical laboratories report to the State Board of Health any information which they obtain on a case of tuberculosis.

Then there are two other bills which are companion bills—one affects the sanatorium at Rockville, and the other Silvercrest Hospital, the Southern Indiana hospital for tuberculosis. These bills will actually establish these two institutions as separate institutions and let them stand on their own feet. The Rockville bill has two new items in it: (1) It will give the institution a new name, The Indiana State Hospital for Chest Diseases. (2) This next point is in both the Rockville and the Silvercrest bills. It provides that our first interest—in both of these hospitals—is the care of the tuberculosis patient and specifically the indigent tuberculosis patient. Then the current bill provides that patients who can pay part and patients who can pay all may be admitted when there are available beds after all indigent tuberculosis patients have been cared for.

In answer to the question of whether or not these bills contain a clause which authorizes the confinement of a person with active tuberculosis to a hospital, Dr. Offutt said: We have, as you know, a commitment procedure in which the patient has his day in court and then he is committed to an institution—he cannot leave there until the superintendent says he is in a non-infectious state, or until he is no longer a danger to the public health. We are amending this control bill to provide that if a person who has TB doesn't submit to an examination, the local health officer may start commitment proceedings. We operate the only institution in which these people who are committed can be detained. Because we have not been able to actually cover the detention area adequately—for financial reasons—some of these people leave, frequently with outside help, sometimes with no help other than themselves. With the new budget we hope to be able to detain these patients.

Another thing in these bills on commitment proceedings is the document which we have suggested which we will provide to any health department who wishes to do these things—who, once he gets in the court—the court can then hand down a writ which will order the prosecutor into court in this case and will confine the suspect in such place as the court determines until his case can be heard. Furthermore, there has never been anything in the act which really says what the doctor has to do to indicate to the court that this individual has tuberculosis. Now the way the bill is drawn, it will be a little bit easier to do this.

DR. ELVIS J. STAHR, President, Indiana University: If you were expecting a speech, you are going to be greatly relieved to know that there isn't going to be any. I just wanted to take advantage of the opportunity afforded by your invitation to come and meet you. I don't have very much to say except I have a little problem these days in which you might be interested that has to do with the further development of the medical center.

For some reason or other, we haven't yet invented a formula for doing all that needs to be done there without funds. I don't know why that is, but we have been unable to find an adequate substitute, and I hope we can count on your support with the General Assembly for the specific item—in particular—that has to do with the furthering of the project of the building of a teaching hospital. Those of you who are familiar with Long Hospital don't need any pictures drawn by me. In fact, it is getting a little bit old . . . and it's not really very economical to try to develop it into a modern hospital. We have a lot of other things that we're talking to the General Assembly about, and I'm not going to bore you with that. It's a great compliment, really, to me—but one which I can't accept—that there are some people who seem to think that I am such a managerial genius that I can continue the upward progress and expansion and needed growth of Indiana University without additional funds. And, as I say, I appreciate the compliment but I'd rather have the money.

I think there is a good deal of—not misunderstanding—but lack of information around Indiana about Indiana University. I learn something new about it every day, myself, as you might expect. And I expect that process to continue for some time. But there are many, many concrete evidences, leaving out the intangibles for the moment, that your state institutions in general and the one with

which I am most closely concerned in particular—are among the best run and most economically and efficiently operated—not just in the Middle West—but in the country. For example, the average state appropriation in the Big Ten—for the nine public institutions in the Big Ten—in other words Northwestern being the only one that is not a public institution—the average state appropriation for a student enrolled in the Big Ten is about $1,400, but the average for Purdue and Indiana is about $800, and yet Purdue and Indiana, believe me, are first rate institutions.

The average number of square feet per student in colleges and universities nationwide—I'm talking about gross square feet per student—is about 16.05, or something like that, a little bit over 16 square feet. At Indiana University, it's 12.9—something of that sort. In other words, we are operating with about—a little over three square feet less per student, which amounts to a great deal—gross of course—less than the national average. Again, I think, this is a reflection of first rate management. I'm not standing here bragging about it, because I haven't been here long enough to be entitled to any credit. But I don't think that these things are very well known.

Everybody gets, from one organization or another, national headquarters or whatever you happen to belong to, different kinds of reports about problems of educational efficiency, space utilization, that sort of thing, and we tend to think that any time anyone finds anything anywhere to criticize, actually that's bound to apply to our own institutions. It just happens that we stand up very favorably on any kind of objective measurement that can be made.

I'll give you another illustration. Indiana ranks 24th among the 40 states in the percentage of personal income represented by its state associations to higher education—but is 38th among the 50 states in the cost, the average cost, tax cost per revenue in the state for each student enrolled in public college or university. Now if you think about this for just a moment, you will realize that that difference is really made up again by what I call efficiency. We are educating more people—and doing it extremely well—for a lot less money than most of our 50 states. When I say doing it extremely well—I get off the objective into valued judgments and so on—but there are some concrete—more or less concrete—ways of measuring quality.

Indiana University, and Purdue, as of about five years ago, are both members of the Association of American Universities, for example, which is the elite group . . . composed of most of the Ivy League—Harvard, Yale, Princeton, Columbia, Cornell—all except Dartmouth, which is not a university and therefore not eligible. On the west coast, California, Stanford, the University of Washington—four or five in the South—Tulane got in about five years ago when Purdue did; Vanderbilt did, Virginia has long been a member—Texas has been a member for I don't know how long—and perhaps the University of South Carolina—but Indiana has been a member for a long time and indeed one of the leading members.

This is a subjective but important estimate of our quality, I think, made by those who are in the best position to judge quality—mainly our great sister institutions in the nation. I could give you a long list of other things. I'm doing this, again, not to brag but to take advantage of any reasonable opportunity to disseminate a little additional information, because we tend to overlook things that are close to home. This is human nature—I realize it,—and I shouldn't have been as surprised as I was when I came out here—to find that Indiana University is much more highly regarded outside the state than inside it.

I have been more or less facetiously telling some of the members of the General Assembly that if they would just appropriate enough money to bring us up to my home state of Kentucky, in terms of the amount—the number of mills appropriated per each student enrolled—I would settle right now. Actually I would, because if they did that, that would give us more money than we have asked for. What I am trying to do is illustrate the point that we are not requesting anything unreasonable. If we get every nickel we've asked for, we will still be below the average of the Big Ten, below the national average, and most other averages in terms of the amount of state money we would have to run our institutions. But we will still have better institutions than most. And I think that this is something for which we don't have to apologize. Quite the contrary, it's something that everybody in this room can be very proud of, because this is basically a job that the Hoosiers have done. I don't pretend to be an expert on medical education—perhaps I ought to be by now—I've been involved with it in one way or another for about eight or nine years—and I learn something new about that every day, too. It's one of the most fascinating elements of higher education and some of its problems are peculiar—not unlike the problems of other professional schools within a large and complex university.

I think we have a fine medical school here. I think the potential to become one of the unquestioned leaders in the nation is very good. The physical location, the nearness to hospitals, the presence of a major metropolitan area of the state with excellent communications, the roads that are going to get better all the time—sitting right here in the middle of America, so to speak, the potential is just wonderful and I am sure that you all recognize that the presence of a planned medical teaching institution in a state or a community has many, many benefits to the practicing profession as a whole—including that middle one of prestige. So that it's bound to rub off on the entire profession—that is—the neighbors of a great medical teaching center.

I'll be glad to answer any questions if you feel

that it's appropriate to ask them. And I do want to thank you for letting me come and meet with you and I hope before I get back down that ivied road, I'll have the opportunity to meet each one of you individually. Thank you.

DR. JOHN D. VAN NUYS, dean, I. U. School of Medicine, discussed:

(1) *The possible need for another medical school in Indiana.* Indiana now has the largest freshman class of the 86 medical schools in the United States. Contrary to the national trend, we are overwhelmed this year with applications, and we are going to have to reject or refuse to accept some students who would have looked very good to us four or five years ago. We have over 900 applications that have been processed to date, taking just a handful of out-of-state students. But we are going to be disappointing quite a few. The question is whether Indiana University itself should try to establish a second medical school. And there is a precedent for that.

The University of Texas is now going into its third medical school. The University of California now has two and is going into a third. The State University of New York has two and now has gone into a third. This is a possibility; the other possibility would be whether or not Purdue University would be interested in starting a medical school. It has good graduate programs and would be competent to have the medical school, either at Lafayette or some other region in the state, possibly in northern Indiana. This is a problem that we all should be thinking about. It has been presented to the board; it has been discussed with the Governor, and I think that it will be a matter that will probably have to come to some kind of decision—hopefully two years from now.

(2) *The straight internship*, which was introduced at the medical center two years ago. As a matter of record, this was discussed before the Council four years ago, and we have been in the process of deciding whether or not to continue an internship at the medical center. We have 26 intern physicians. We have found ourselves in not a very satisfactory situation as far as internships are concerned, partly because of a very elaborate residency program— 200 and some residents—and the senior clerks at the other end of the chain of command.

The internship traditionally at the medical center was a part of the hospital administration. Interns were under the administrator of the hospitals, they were hospital employees. Students are academic people. The residents are academic people. We decided to make the interns academic people. And so, we offered what we called the straight internship. It should have been called a mixed internship. This is the way it works. We have these internships in medicine, surgery, pediatrics and obstetrics. An applicant for a straight medical internship becomes the responsibility of the chairman of the Department of Medicine. He spends six months in this department. The remaining six months are spent in other departments but he is still the responsibility of the Department of Medicine. Arrangements are made for him to have pediatrics, obstetrics, surgery, his choice of psychiatry or neurology, etc. He is invited to attend the Department of Medicine staff meetings.

A similar arrangement applies to all straight internships, surgery, pediatrics, obstetrics, neurology, etc. This program has worked out very well—the interns like it.

The question has been asked me, "Will it produce many general practice men?" I think it will not. But I think it is not a departure from anything that has been present the last 25 or 30 years. I don't believe that the university here or many other university hospitals have produced many general practitioners out of the interns that come to the university hospitals. Now I don't say that this is good; we don't like it to be that way.

Remember, no longer do we have routine cases coming to the medical center—they are all referral cases and they are not good intern material for general practice. Frankly, when a boy comes in and wants advice as to an internship and he says he wants to go into general practice, we try to find him a good municipal or county internship. Now, we are not de-emphasizing the need for general practice.

Here Dr. Van Nuys gave statistics resulting from a survey made for the years 1947 through 1955, showing percentages of graduates who go into general practice. "Of 138 students graduating in 1955, 46 went into general practice in Indiana; 15 entered general practice outside of Indiana. Fourteen went elsewhere in the United States. We have 12 in residency training still in Indiana, and 20 in residency training outside of Indiana. Of those who have already entered specialty practice, we have 13 remaining in the state and we have 19 practitioners, specialists, who are outside of the state. Twelve are in the armed forces, VA, Federal and state hospitals and the United States Public Health Service, and one missionary in Africa. And that's the total spread.

I hope I have made a fair explanation of our so-called straight internship program. We think it is a good one. We think that it is not detracting, it is not in competition with the rotating internships, which we think have a great deal of merit."

The straight intern program was discussed further by Drs. Glock and George T. Lukemeyer, chairman of the House Staff Committee, Department of Medicine, I. U. School of Medicine.

Dr. Glock said, "I think that you're going to find that the members of the state association are still going to keep coming back to you and saying 'We would like to have the rotating internship available.' "

DR. GEORGE T. LUKEMEYER: I welcome the opportunity of discussing internships in general and, specifically, the straight internship program at the Indiana University Medical Center. I would

like to call attention to a statement in the Education Number of *The Journal of the Ameriean Medieal Association*, Vol. 182, No. 7, November 17, 1962. This is found on page 111 in the "Essentials of an Approved Internship."

"Most authorities today are agreed that after graduation from medical school every physician should have at least two years of graduate education and training in a hospital before he undertakes the practice of medicine." It is my understanding that the Academy of General Practice for graduates after January 1, 1966, will define acceptable training for the general practitioner as follows ". . . at least one year of rotating internship [at an approved hospital]. In addition he must have completed one of the following: (1) Two years of graduate training acceptable to and approved by the Commission on Education, or (2) One year of graduate training . . . followed by two years of general practice."

The charts and figures indicate that the rotating internship at the Indiana University Medical Center was not attracting our own graduates. Our intern program lacked stability. In 1947-48 there were 34 interns at the medical center and in 1958 there were but 12 interns. Of the 139 graduating seniors in 1958, only two interned at the medical center. We were of necessity appointing out-of-state graduates of varying caliber. Thus far, the straight internship seems to be attracting more and better interns.

Students are advised that many fine hospitals offer good rotating internships. We do not "knock" the rotating internship. The interns at the medical center have intimate contact with our third and fourth year students on the hospital wards. We feel a deep obligation to expose our medical students to intelligent and talented interns and residents.

The Indiana University Medical School graduates were not interested in a rotating internship at the medical center. The students, of today, rotate through the clinical services on our hospital wards during their junior and senior years. There is no logical reason at this time to believe that a return to the rotating internship at the medical center would evoke a favorable response among our students. It would be a step in the wrong direction.

We are currently studying our own program and feel that we should consider a new internship program to supplement our present straight internships. As members of the Indiana State Medical Association, we should evaluate critically all of the internships in the state. We would like to ask your help; we think it is important to plan for the future, and it may well be that there is a need for a different type of internship to help prepare young physicians for general practice. This applies to all hospitals conducting an intern training program.

Unfinished Business

1. *Building Committee.* DR. RALPH EVERLY, chairman: The Building Committee is very grateful to President Glock for his generous donation that he recently made to the building fund. The amount is earmarked for a kitchen facility. At present food is catered in and kept warm by the old Sterno method, until used. Experience dictates that the members sincerely enjoy food served in the cafeteria style and it gives committee and commission members an opportunity to eat, enjoy sincere fellowship and discuss mutual problems under our own roof. As funds accumulate and are made available for the establishment of an on-the-site food service, we shall plan on and set up a kitchen and dining facility in a portion of the large basement area.

The headquarters office is functioning very well at 3935 North Meridian Street. Our employees have an adequate and cheerful environment in which to work.

Through the efforts of our assistant association treasurer, Dr. Olvey, many members have recently contributed to the building fund and we are sincerely grateful for these donations.

2. *Student Loan Fund.* DR. LESTER D. BIBLER, chairman, reported a balance of $1,305.00 in the loan fund, with several applications for $500.00 each on file awaiting action of the Student Loan Committee. Approximately $10,395.00 is outstanding on notes held by 21 physicians who have completed internships and are now in practice. Dr. Bibler pointed out that the most difficult task the committee has is to collect on these past due accounts and remarked that "the one thing that may be the cause of the reluctance of these gentlemen to pay up their obligations is the fact that the interest rate is very low on loans from the association and naturally these men will pay off their high interest rate loans first. This will be discussed at our next committee meeting and we'll present a recommendation at that time."

3. *Medieal Care for Military Dependents.* **On motion of Drs. Edwards and Steen the Council voted for continued participation of the association in this program.**

4. *Couneil Liaison Committee with Blue Shield Board of Direetors*, composed of Drs. Edwards, Paris, Bennett, and Wiseman, reported they would be meeting with Blue Shield on Sunday, January 27, 1963.

The Council discussed the letter prepared by Dr. Walter L. Portteus, president of Mutual Medical Insurance, Inc., and presented to the Executive Committee of Blue Shield concerning (1) the manner in which members of the Blue Shield board and the Council are selected by the membership of the association, and (2) failure of board members to discuss matters in board meetings and then going outside the meeting and giving a different picture than what actually happened at the meeting.

Dr. Portteus proposed two methods for the

election of councilors and Blue Shield Board members, as follows: (1) Councilors and Blue Shield district board members to be elected by the district if 40% of the eligible physicians of the district are present at the meeting. (2) In the event the attendance is below 40%, that the president and secretary of the county societies with the delegates or alternates to the Indiana State Medical Association from each county society in the district constitute a committee to nominate and elect the councilors and the Blue Shield district board members.

The secretary was instructed to send a copy of Dr. Portteus' letter to each member of the Council in order that it may be discussed at the next Council meeting.

Dr. Glock suggested that a copy of the letter be sent to the Commission on Constitution and Bylaws as the place and purpose of the district medical societies in the state medical association should be clarified.

5. *Nominations for Blue Shield Board members.* Three members-at-large to be nominated for the three-year term starting March 1, 1963 and ending March 1, 1966.

At the April, 1962 Council meeting, Dr. Walter L. Portteus, Franklin, (general practice) was nominated to succeed himself for the three-year term ending March 1, 1966.

By ballot, Dr. Bernard D. Rosenak, Indianapolis (internal medicine) was nominated to succeed himself, and Dr. Edward T. Edwards, Vincennes (physical medicine) was nominated for the three-year term ending March 1, 1966.

6. *Report of Blue Cross representative.* In the absence of Dr. William Stangle, chairman of the Professional Advisory Committee of Blue Cross, the chairman of the Council reported that on recommendation of the House of Delegates, the physician members of the Blue Cross board had presented to the board Resolution No. 12 (adopted by the House of Delegates, October 10, 1962) which resolved "That this House of Delegates instruct its representatives on the Blue Shield board to accomplish as quickly as possible the transfer of the means of payment for all physicians' services from Blue Cross to Blue Shield.

"Be It Further Resolved that the House of Delegates instruct its representatives on the Blue Cross board similarly, and that a copy of the resolution be presented by an Ad Hoc Committee appointed by the ISMA president to the Indiana Hospital Association to more effectively achieve the objective of the resolution, and that a copy of the resolution be sent to each member hospital."

THE CHAIRMAN: The resolution was protested by labor, the hospital representatives, and the public representatives. As a result, we attempted to have the resolution returned to the Medical Advisory Committee for further consideration. This motion was tabled and so, as a result, the resolution did not progress any further.

Each member of the Council was given a resumé, prepared by Mr. Guy Spring, of the situation in regard to Blue Cross and Blue Shield relating to pathology and radiology, for consideration and study.

This subject was discussed further by Drs. Rifner, Glock and Edwards.

1963 Annual Convention, Indianapolis October 14 to 17, 1963

DR. VIRGIL C. McMAHAN, chairman of the Commission on Convention Arrangements, presented the following tentative program for consideration of the Council:

Monday, October 14, 1963:

Executive Committee meeting
Council meeting
1:00 p. m. Meeting of House of Delegates
3:00 p. m. Reference Committee meetings

Tuesday, October 15, 1963:

8:00 a. m. Reference Committee meetings continue
8:00 a. m. Annual golf tourney
8:30 a. m. Registration begins
9:00 a. m. Trap and skeet shoot
9:00 a. m. Bowling tourney
1:00 p. m. Section meetings
2:00 p. m. Meeting of House of Delegates
5:00 p. m. Smoker—Award trophies
8:00 p. m. Fireside conferences

Wednesday, Oetober 16, 1963:

8:30 a. m. Buses leave for hospitals
9:00 a. m. Clinical conferences—tours through hospitals
9:00 a. m. Movies on subjects of interest will begin at Murat
11:00 a. m. Return to Murat to view technical exhibits
1:00 p. m. General Session—program by Section on Internal Medicine
2:30 p. m. Visit exhibits
3:30 p. m. General Session—program by Section on Nervous and Mental Diseases
6:00 p. m. Cocktail hour
7:00 p. m. President's dinner

Thursday, October 17, 1963:

9:00 a. m. Color TV program from I. U. Medical Center through auspices of Smith Kline and French Laboratories. Afternoon session on scientific subjects.
3:00 p. m. Final meeting of House of Delegates to elect officers

Following discussion by many, it was agreed that the first meeting of the House of Delegates should be scheduled for 3:00 p. m., Monday, October 14, and that the reference committees should meet Monday evening and again on Tuesday morning, October 15. Also, it was suggested that the last meeting of the House of Delegates, at which time officers are elected, should be held earlier in the day than 3:00 p. m.; this probably should be a breakfast meeting.

Dr. McMahan asked the Council to pass on the idea of charging a fee of one or two dollars for the clinical conferences. **By consent decision in this matter was left to the discretion of the Commission on Convention Arrangements.**

It was taken by consent that the business and scientific sessions should not conflict.

Dr. Corcoran offered the following suggestions, which were accepted by the Council: (1) Discontinuance of the verbatim reading of the reference committee reports, in order to streamline the House of Delegates meetings; (2) limiting the time allotment for guest speakers; and (3) that resolutions of appreciation be introduced by title only.

Legislative Matters

DR. JOSEPH M. BLACK, chairman, Commission on Legislation, spoke briefly on matters of interest to the medical profession that may come before the current General Assembly:

(1) The corporate practice act, which, if introduced, will be supported by the Commission on Legislation, by mandate of the House of Delegates.

(2) The bill prepared by the Indiana Hospital Association to allow tissue committees and mortality study committees immunity from being subpoenaed into court, and giving hospitals immunity from having their records subpoenaed and given to someone else . . . to prepare. Dr. Black said, "As a part of medical ethics, I feel that the state medical association should prepare this legislation and introduce it."

(3) The bill which will allow a physician to be a member of the board of trustees of a hospital.

(4) The good samaritan bill which would make it unlawful to sue a physician who voluntarily rendered medical aid to a person or persons involved in an accident.

Dr. Black also discussed several rulings which have come from the State Board of Medical Registration and Examination during the last two or three months. "As you all know, the board is appointed by the Governor. I feel, as I think most of the profession feels, that this board has a certain responsibility to the profession as well as it does to the Governor. The board has adopted a ruling by which reciprocity endorsement has been discontinued with states in which the state board pays a professional group to prepare and grade examinations. This ruling was adopted without examination of the questions given and was based solely on disagreement with the principle and involves about ten states. . . . This seems to be an undue hardship imposed on institutions seeking physicians and on good physicians trying to enter the state because of disagreement with their own state medical boards. That is, the Board of Registration feels that if someone prepares their examination for them and grades it, that person will not be allowed to practice in Indiana unless he takes our state board. Effective July 1, 1963, temporary licenses will no longer be issued. This means that a physician who took the national board examination, which we do not accept in Indiana, or from states with which Indiana does not have reciprocity, or interns who fail state board examinations, cannot practice in the state while awaiting to take our state board examination."

The secretary explained that Indiana does not accept those who have taken the national board examinations because the Indiana Attorney General has ruled that under the Medical Practice Act, an applicant for a license in Indiana must take a written examination which must be graded by the Indiana Board.

DR. WOOD: I have no quarrel about requiring citizenship for any doctor who practices in Indiana. This is fine. . . . But certainly on the intern and residency exchange program that exists, they cannot, in my opinion, rule out temporary licensures to these individuals to allow for their postgraduate education in the field of intern and residency training. I think we should oppose this on that basis.

Dr. Van Nuys said: "I would plead that this organization go on record as supporting—those of us that are in the intern and resident training program—that we get some hearing on this matter cleared up before July 1 because I think we are in serious difficulties."

Dr. Black's motion that at sometime in the future the Council meet with the medical members of the State Board of Medical Registration and Examination was adopted by consent.

It was agreed that the representatives of the State Board of Medical Registration and Examination should be invited to meet with the Council at its next meeting.

Economic and Organization Matters

1. *1962 membership report by districts,* as follows, was presented:

Membership Report

INDIANA STATE MEDICAL ASSOCIATION

December 31, 1962

DISTRICT	Members ISMA	# Delegates 1963 Session	AMA	Gain or Loss Over 1961 ISMA	AMA	Removed from ISMA Non-Payment	Deaths	Non-Members Elig.	Non-Elig.
1st District									
Gibson	15	1	14	—	—			1	

DISTRICT	Members ISMA	# Delegates 1963 Session	AMA	Gain or Loss Over 1961 ISMA	AMA	Removed from ISMA Non-Payment	Deaths	Non-Members Elig.	Non-Elig.
Perry	13	1	13	—	—		1		
Pike	4	1	4	—	—				
Posey	10	1	10	—1	—1				
Spencer	6	1	4	—	—1				
Vanderburgh	235	5	230	+2	+4	1	4	9	1
Warrick	11	1	11	—1	—2			1	
Total	294	11	286	—	—	1	5	11	1
2nd District									
Daviess-Martin	19	2	18	—1	—1	1		1	
Greene	16	1	9	—	+1				
Knox	41	1	39	—2	—2		1		
Owen-Monroe	58	2	53	+5	+2			5	
Sullivan	15	1	13	—1	—1				
Total	149	7	132	+1	—1	1	1	6	
3rd District									
Clark	38	1	37	+5	+4			1	
Dubois	24	1	20	+1	—		1	1	
Floyd	40	1	40	—	—		1	2	
Harrison-Crawford	13	2	13	—1	—1		2		
Lawrence	25	1	23	—3	—3		1		
Orange	9	1	9	—	—		1		
Scott	3	1	3	—	—			3	
Washington	8	1	8	+1	+1				
Total	160	9	153	+3	+1		6	7	
4th District									
Bartholomew-Brown	41	2	40	—3	—3			2	
Dearborn-Ohio	22	2	20	+3	+2		1	1	1
Decatur	12	1	9	—	—				
Jackson-Jennings	24	2	21	—2	—	1	1	2	
Jefferson-Switzerland	26	2	25	—2	—1				
Ripley	9	1	7	—	—			1	
Total	134	10	122	—4	—2	1	2	6	1
5th District									
Clay	13	1	13	+1	+1				
Parke-Vermillion	24	2	24	+1	+1	1	4	1	
Putnam	17	1	17	+1	+1				
Vigo	118	2	118	+1	—		2		
Total	172	6	172	+4	+3	1	6	1	
6th District									
Fayette-Franklin	18	2	18	—	—				
Hancock	21	1	21	—	—			1	

DISTRICT	Members ISMA	# Delegates 1963 Session	AMA	Gain or Loss Over 1961 ISMA	AMA	Removed from ISMA Non-Payment	Deaths	Non-Members Elig.	Non-Elig.
Henry	44	1	44	—2	—2		4		
Rush	15	1	15	—	—				
Shelby	18	1	18	—	—	1		4	
Wayne-Union	73	2	68	—2	—1		1	1	
Total	189	8	184	—4	—3	1	5	6	
7th District									
Hendricks	20	1	20	+1	+1			2	1
Johnson	30	1	30	—3	—3	1		1	
Marion	1047	21	1044	—31	—31		20	55	3
Morgan	15	1	14	—1	—2		1	1	
Total	1112	24	1108	—34	—35	1	21	59	4
8th District									
Delaware-Blackford	113	3	106	—3	—5	1	6	2	1
Jay	19	1	17	+3	+3		2		
Madison	104	2	100	—2	—2	2	5	3	1
Randolph	22	1	17	—	+1				
Total	258	7	240	—2	—3	3	13	5	2
9th District									
Benton	9	1	8	—1	—1	1	1		
Boone	18	1	18	—	—1		1	1	
Clinton	19	1	19	—1	—1				
Fountain-Warren	16	2	16	—	—				
Hamilton	25	1	19	+1	+3	1			
Montgomery	26	1	26	—3	—3		1	3	
Tippecanoe	117	2	116	+3	+1	1	1	2	
Tipton	11	1	11	—	—				
White	12	1	12	+1	+1		1		1
Total	253	11	245	—	—1	3	5	6	1
10th District									
Jasper-Newton	12	2	12	—	—				
Lake	430	9	398	+3	+2	9	9	10	3
Porter	29	1	29	+1	+1			2	
Total	471	12	439	+4	+3	9	9	12	3
11th District									
Carroll	9	1	9	—1	—1				
Cass	40	1	38	—2	—3	1	1		2
Grant	67	1	66	—	—	1		6	
Howard	59	1	59	+4	+4				1
Huntington	24	1	23	+1	+1		2	1	
Miami	14	1	13	—1	—2	1	1	4	1

DISTRICT	Members ISMA	# Delegates 1963 Session	AMA	Gain or Loss Over 1961 ISMA	AMA	Removed from ISMA Non-Payment	Deaths	Non-Members Elig.	Non-Elig.
Wabash	26	1	25	+1	+3		1		1
Total	239	7	233	+2	+2	3	4	11	5
12th District									
Adams	14	1	14	—1	—1				
Allen	275	5	274	+7	+7		6	6	2
De Kalb	19	1	19	—3	—		1	1	
LaGrange	10	1	10	+1	+2				
Noble	16	1	16	—2	—1				
Steuben	14	1	14	—1	—1			2	
Wells	35	1	36	+5	+6				
Whitley	21	1	21	+4	+4				
Total	404	12	404	+10	+16		7	9	2
13th District									
Elkhart	109	2	106	+4	+4	1	2	8	
Fulton	11	1	11	+2	+2				
Kosciusko	18	1	17	+1	—			1	
LaPorte	94	2	92	—1	—1	2		2	
Marshall	26	1	25	+4	+3			1	
Pulaski	6	1	6	—1	—				
St. Joseph	235	5	235	+6	+7		1	4	1
Starke	6	1	6	—	—				
Total	505	14	496	+15	+13	3	3	16	1

SUMMARY

1st District	294	11	286	—	—	1	5	11	1
2nd District	149	7	132	+1	—1	1	1	6	
3rd District	160	9	153	+3	+1		2	7	
4th District	134	10	122	—4	—2	1	2	6	1
5th District	172	6	172	+4	+3	1	6	1	
6th District	189	8	184	—4	—3	1	5	6	
7th District	1112	24	1108	—34	—35	1	21	59	4
8th District	258	7	240	—2	—3	3	13	5	2
9th District	253	11	245	—	—1	3	5	6	1
10th District	471	12	439	+4	+3	9	9	12	3
11th District	239	7	233	+2	+2	3	4	11	5
12th District	404	12	404	+10	+16		7	9	2
13th District	505	14	496	+15	+13	3	3	16	1
Total	4340*	138	4214	—5	—7	27	83	155	20

* Includes 47 full dues paying members who are out of the state.

2. *Remission of state dues.* The Council voted the remission of state dues as follows:

Lake County—One member, who has retired from practice, on motion of Dr. Steen, taken by consent.

Marion County—Two members, both of whom are medical missionaries, one in Korea and the other in Nicaragua, by consent, on motion of Dr. Donato.

New Business

1. *Mental Health.* DR. GLEN WARD LEE, chairman of the Steering Committee on Mental Health, reported in detail on the implementation in Indiana of the aims and objectives of the American Medical Association on mental illness and health. The Joint Steering Committee on Mental Health is composed of five members from the state medical association, five from the Northern Indiana and Indiana District branches of the American Psychiatric Association, and five from the Indiana Mental Health Association. The committee will attempt to have each county medical society represented at the February 20 statewide Congress on Mental Health.

DR. LEE: Our objective is to get all interested persons and agencies in each community who have an interest in public health to meet together to consider what is being done with regard to mental health in the community at present; and, to plan for necessary expanded facilities and operations in the future. We believe the calling together of such interested persons and agencies to prepare a self survey of community mental health facilities now existing will further our objective. First by making them look carefully at the facilities which they now have, with the idea that when they see how little some of them do have, they will be stimulated to work for the improvement of mental health treatment facilities in their community. Secondly, we believe the information brought together in such a survey should be compiled into a brochure which can be distributed to individual physicians and other interested parties.

We are trying to take the leadership in bringing together the agencies and activities interested in the mental health field in order that a concerted effort may be made to improve mental health care at the community level as recommended at the AMA Congress on Mental Health in October, 1962.

To continue this effort we must have some funds with which to operate. At the last meeting of the Joint Steering Committee, a resolution was passed requesting the Indiana State Medical Association, the State Mental Health Association and jointly the Northern Indiana and Indiana District branches of the American Psychiatric Association, to each contribute $500, for a total of $1,500.

Dr. Ginsberg, our State Mental Health Commissioner, has advised the Joint Steering Committee that he is to receive approximately $85,000 in federal funds with which to make a survey in depth and to prepare a statewide plan for the development and implementation of expanded community mental health facilities. He desires to use the Joint Steering Committee to advise and help supervise this program. At such time these funds become available to the state, we will be able to use a portion of these funds for the continued work of the committee.

On motion of Drs. Edwards and Steen, the Council appropriated $500.00 for use of the Steering Committee on Mental Health.

2. *Matters referred to Council by Executive Committee:*

a. Dr. Covalt, chairman of the Executive Committee, reported that Dr. E. S. Jones had invited the Council on Occupational Health to meet with the Indiana State Medical Association in 1965 and that this organization had accepted the invitation.

b. **The possibility of holding the 1965 annual meeting in Evansville was discussed and it was taken by consent that the 1965 convention should be held in Indianapolis.**

c. *Use of headquarters building by outside organizations.*

Request of one of the allied health groups to meet in the headquarters building was brought to the attention of the Council for action. Statistics compiled from questionnaires sent by the Executive Committee to all state medical societies were read indicating that 40 societies permit other groups to meet in their buildings. In addition to medical or allied groups, 45 states permit professional groups such as the Bar Association, Dental Association, etc., to use their buildings. Thirty-four states permit groups to meet at times other than during regular office hours; 11 do not. Twelve states charge for the use of their buildings; 28 do not. Charges run anywhere from $5 to $75. Mr. Hollowell discussed the question from the tax angle.

Dr. Popp's motion to defer action on this matter was taken by consent.

d. Payment of state association treasurer's expenses to AMA meetings. On motion of Drs. Popp and Black, the Council approved payment of the treasurer's expenses in attending AMA meetings.

e. *Resolutions Nos. 2 and 7,* adopted by the House of Delegates, October 10, 1962, were brought to the attention of the Council for concurrence. Resolution No. 2 directed the state medical association "to consult or plan with the I. U. School of Medicine to incorporate one or two years of practice in small communities into their internship and residency programs." Resolution No. 7 directed "the Executive Committee of the state medical association to contact the faculty Executive Committee of I. U. School of Medicine to arrange for suitable internships and residency training programs in the field of general practice so that we may provide adequate family physicians in the State of Indiana."

It was the consensus of the Council that these are matters that should be handled by the Liaison Committee with the I. U. School of Medicine

which was appointed by the chairman of the Council and is composed of Drs. Glock, Wood, Covalt, Neumann, and Black, and by consent it was so ordered.

f. *Student loan.* Dr. Covalt discussed the loan plan proposed by the Indiana National Bank. This matter is to be referred to the Student Loan Committee and also to the Council at its next meeting for consideration. In the meantime a copy of the letter from the Indiana National Bank covering details of the plan is to be sent to each councilor.

g. *Seienee Fair.* The recommendation of the Reference Committee on Medical Education and Hospitals, which was approved by the House of Delegates at French Lick on October 10, 1962, that "the Council reconsider *actively supporting* the Science Fair" was discussed. **Dr. Popp moved that the Council "do support" this activity. Motion seconded by Dr. Paris.**

Dr. Glock moved that this matter be tabled until the April Council meeting and "in the meantime that it be referred to some other commission for study." Motion seconded by Dr. Black, put to vote, and carried.

h. *The Artieles of Agreement of the Indiana Joint Counеil to Improve the Health Care of the Aged were approved on motion of Dr. Popp, taken by consent.*

i. *Actions of Commission on Inter-Professional Relations referred to the Council:*

(1) Pharmacists filling prescriptions written by podiatrists. The Council concurred in the opinion of the state attorney general, that this is an illegal procedure. **The Council approved the recommendation of the Inter-Professional Relations Commission that the attorney general's opinion be supported and that restriction on prescription writing by podiatrists be continued.**

The Council also agreed with the Commission on Inter-Professional Relations that the official opinions expressed in the letter of the attorney general should be sent to the Indiana Pharmaceutical Association in order that the pharmaceutical association might be cognizant of these opinions.

(2) Sales tax on prescription items. **It was taken by consent that the Council is opposed to a sales tax on prescription items.**

j. *I. U. Board of Trustees Candidacy.* Dr. Black announced that an Indianapolis dentist had asked him to call the Council's attention to the fact that he is a candidate for membership on the board of trustees of Indiana University and he would appreciate the support of the medical profession. **By consent it was felt that such support should not be actively engaged in by the Council, but that this should be brought about through the medical school alumni association.**

Spring Meeting of the Council

By consent the date for the spring meeting of the Council is to be set by the chairman.

There being no further business, the meeting was adjourned.

EXECUTIVE COMMITTEE

February 20, 1963

Present: Wendell E. Covalt, M.D., chairman; Ralph V. Everly, M.D.; Maurice E. Glock, M.D.; Don E. Wood, M.D.; Kenneth O. Neumann, M.D.; Irvin W. Wilkens, M.D.; Ottis N. Olvey, M.D.

Robert Hollowell, attorney, and James A. Waggener, executive secretary.

Guests: Mrs. Thomas Johnson, Mrs. John Sullivan, Mrs. Jack Shields.

Woman's Auxiliary

Representatives of the Woman's Auxiliary met with the Executive Committee and Dr. Covalt read a letter which had been transmitted to the Executive Committee by Mrs. Johnson, president of the auxiliary, pointing out that the auxiliary is having problems in operating at the district level and seeking assistance of the association in developing a means of strengthening the auxiliary organization. Mrs. Johnson then commented on the fact that their councilor system and councilor district organizations had never functioned effectively. They had experienced difficulty in having representation of the district at district meetings, but on an experimental basis they had instituted area meetings which were workshop in nature and which, in their opinion, have been very successful, not only from an attendance standpoint but also from an interest standpoint.

Upon motion of Drs. Glock and Neumann, the secretary was instructed to write Mrs. Johnson a letter recommending the discontinuance of their district organization meetings and substituting in lieu thereof area workshop type meetings.

The auxiliary then requested what other assistance they might give the association program and it was suggested that they encourage the procurement of drug samples and discarded medical supplies for mission hospitals and continue their fine assistance in legislative activities.

Membership Report

Number of members as of December 31, 1962		4,340
1963 members as of February 19, 1963:		
Full dues paying	3,046	
Residents and interns	96	
Council remitted	26	
Senior	335	
Honorary	2	
Military	46	
Total 1963 members as of February 19, 1963		3,551
Number of members as of February 28, 1962		3,745
Loss over last year		194
Number of AMA members as of Jan. 31, 1963		2,659
Total 1962 AMA members as of Jan. 31, 1962		2,343
Gain over last year		316
1963 AMA members: Dues paying	2,171	
Exempt, but active	488	
		2,659
Number who have paid state dues but not AMA dues as of Jan. 31, 1963		69

Annual Convention, Indianapolis, October 15, 16, 17, 1963

The committee reviewed the preliminary program for the 1963 convention. No action was taken.

A letter was read from M. F. Greiber, M.D., chairman of the Section on Nervous and Mental Diseases, concerning funds to provide gratuities and traveling expenses for speakers which his section has been authorized to procure for one of the general scientific meetings during the annual session.

Building Matters

The question of final acceptance and final payment on the construction of the building was raised and on motion of Dr. Glock, taken by consent, this matter was deferred until the next meeting of the Executive Committee.

The Planned Inspection Service Contract of the Carrier Air Conditioning Company was discussed by the committee. On motion of Dr. Glock, taken by consent, this matter is to be deferred until the warranty period has run.

The maintenance agreement covering the Johnson controls in the building was presented to the committee and on motion of Drs. Everly and Glock this agreement was approved, if approved by the attorney.

Treasurer's Office

Financial statements for January 1963 were approved by consent.

Dr. Glock presented the association a check in the amount of $621.11 to start a fund for the installation of kitchen equipment in the new building.

Legislative Matters

Dr. Wood reported on the current status of national and local legislation.

Organization Matters

A letter was read from the chairman of the Commission on Public Health in which the commission recommended cooperation with the "Youthpower Movement" but stated it did not feel that financial support was necessary. This commission also had been requested to make a recommendation for a physician to represent the association on the Committee on Workmen's Compensation of the Indiana State Chamber of Commerce, and the commission recommended Drs. Emmett B. Lamb, Louis W. Spolyar and Daniel Gard.

AMA Board of Trustees. The secretary read several letters which had been received from other states regarding the announcement of the candidacy of Dr. Lester Bibler for membership on the Board of Trustees of the American Medical Association.

The secretary read for the information of the committee a letter from the American Medical Association acknowledging the recommendation of the association of Dr. Maurice Marks of Indianapolis as liaison representative between the office of the Surgeon General, Department of the Air Force, and the Indiana State Medical Association.

A letter was read from the Judicial Council of the American Medical Association acknowledging receipt of the association's inquiry concerning the status for membership of California osteopaths who have been granted M.D. degrees by the recent changeover in California. The reply stated that this matter would be referred to the Judicial Council at its next meeting.

Physicians' Pension Plan. A letter was read from the American Medical Association concerning the desires of the Indiana State Medical Association as to whether or not the AMA should investigate the feasibility of establishing a physicians' pension plan. Upon motion of Drs. Wood and Wilkens, this communication is to be referred to the Commission on Medical Economics and Insurance.

A communication was read from the Commission on Voluntary Health Agencies concerning a proposed meeting at which time a representative of the National Health Council is to discuss a uniform accounting plan, and the proposed meeting was approved by consent.

An inquiry from a registered nurse asking whether or not the association would have any objection to her taking blood pressures at an exhibit on May 10 and 11 during a merchants' trade fair was referred to the committee. It was the opinion of the committee that this would not be good practice. The secretary was requested to refer this matter to the members of the Marion County Medical Society for discussion with the nurse.

Future Meetings

The secretary stated that Dr. Norman Booher would like to attend the National Health Council meeting in Washington, March 18 to 21, at which time a discussion of voluntary health agencies was to take place, and also he had been invited to meet with the Shipman Committee during this period of time. Dr. Booher was authorized to attend this meeting upon motion of Drs. Wood and Everly.

Notice of the AMA Rural Safety Conference, to be held in Chicago on April 5 and 6, 1963, was read, and on motion of Drs. Wood and Everly no representative is to be sent to this meeting.

Letter from the AMA requesting the executive secretary to attend, at AMA expense, the mental health meeting to be held in Chicago on March 1 and 2, 1963, was approved by consent.

There being no further business the committee adjourned to meet again at 4:00 p.m., Wednesday, March 27, 1963.



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The evidence is in. More than 8,000 published reports verify the effectiveness and safety of fluoride as prophylaxis against dental caries. Yet most communities today are still without water fluoridation.

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75TH ANNIVERSARY ABBOTT

1. Prescribing Supplements of Dietary Fluorides, Council of Dental Therapeutics, J.A.D.A., 56:591, April, 1958.
2. Fluoride Compounds, Accepted Dental Remedies, 27th Ed.:139, 1962.

VI-DAYLIN w/FLUORIDE—Multivitamins with Fluoride. SUCARYL—Abbott's Non-Caloric Sweetener.

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304213



This summary of what is happening in Washington is prepared by A.M.A.'s Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D. C.—A presidential advisory commission urged a massive attack by the federal government on illicit traffic in narcotics and dangerous drugs.

The commission recommended establishment of a special unit of investigators and lawyers in the Department of Justice to hunt down and prosecute big-time smugglers and sellers.

For the addict, the commission suggests more emphasis on rehabilitation rather than punishment. The commission said penalties in federal narcotics laws are too rigid for some of the lesser offenses and urged that these be relaxed to give courts more discretion in dealing with these offenders.

In an interim report, the commission also touched on the controversial question of whether drugs should be dispensed to addicts in treatment by physicians. It recommended that the American Medical Association and the National Research Council "submit definitive statements as to what constitutes legitimate medical treatment of an addict, both in and out of institutions."

The commission said it intends to make an intensive study of the issue of discipline versus rehabilitation in the treatment of drug abusers. It said it considered a combination of the two approaches best.

Other major recommendations included:

Stricter control of the manufacture and use of the so-called "dangerous drugs," such as barbiturates and amphetamines.

A comprehensive research program into all phases of drug abuse.

Establishment of a joint United States-Mexican commission to control the illicit traffic of narcotics and drugs from Mexico into the United States.

On the same day, the New York Academy of Medicine issued a report sharply attacking what it called the Federal Bureau of Narcotics' "punitive attitude" of treating drug addicts as criminals and attempting to control addiction by imposing stiff legal penalties.

The report of the New York physicians charged the Bureau of Narcotics with forcing "unsound" medical treatment of drug addicts,

Continued



Accredited psychiatric hospital for private diagnosis and treatment

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Forty-acre estate to assure privacy in a restful environment.

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HEW LICENSES MEASLES VACCINES

The Department of Health, Education and Welfare licensed the manufacture of both a live-virus and a killed-virus measles vaccine.

Merck Sharp and Dohme of Philadelphia was licensed to market a live-virus measles vaccine and Charles Pfizer & Co. of New York City was licensed to market a dead-virus vaccine in what health officials foresaw as the weapons for possible victory in the age-old battle against the persistent and often serious ailment.

Merck Sharp and Dohme made available a limited quantity of the live-virus vaccine throughout the United States within two days of the licensing on March 21.

Surgeon General Luther L. Terry of the Public Health Service urged inoculation of any child under the age of six who had not had measles.

Dr. Hugh H. Hussey, director of the American Medical Association's Division of Scientific Activities, said the new vaccines made it possible to launch an all-out attack against one of the most common childhood diseases.

Both HEW Secretary Anthony J. Celebrezze and Dr. Terry were optimistic about the possibility of the vaccines putting the nation on the road toward elimination of the disease.

Development of the measles vaccines stemmed from the work of Nobel prize winner, Dr. John Enders of Harvard University and an associate, Dr. Thomas Peebles, who isolated a strain of the measles virus in 1954. From this original strain of the virus, designated the Edmonston strain, both the live and the killed vaccines have been produced.

Over the past several years, the vaccines have been successfully tested in both this country and abroad. Nearly 50,000 children in the United States alone have received these vaccines in field trials. Celebrezze characterized the field trials as "a long and painstaking evaluation" and said that "this was made possible by the cooperative efforts of scientists--both in and out of government--by physicians, the pharmaceutical industry, and thousands of unselfish and courageous parents who have permitted their children to participate in the field trials."

A Surgeon General's advisory committee on measles control, composed of government and non-government experts, suggested most physicians would want to administer the live vaccine, with an accompanying shot of gamma globulin to reduce reactions. One injection of the live vaccine has conferred complete immunity to more than 95% of those vaccinated and susceptible to measles. But when given alone it produces side reactions, including a rash and a fever of at least 103 degrees, in 30% or more of those vaccinated.

The advisory committee said the killed vaccine, because of its

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poorer immunizing qualities, should be used only where the live product wasn't suitable.

Experts said the live vaccine's protection was as good as that resulting from the natural disease and had been demonstrated to last more than four years.

The estimated number of measles in the U. S. was 6.8 million in 1962 and averages at least 4 million a year annually. In 1961 there were 434 deaths from measles.

Government health officials said they anticipated no federal financing or distribution of the measles vaccine. It was expected the distribution will be through physicians in private practice or through community "well baby" clinics.

MENADIONE USE BANNED BY FDA

The Food and Drug Administration banned the use of menadione (vitamin K-3) in foods and food supplements.

An FDA spokesman said the ban was ordered because the agency decided that the manufacturer had not provided sufficient data under the food additive law to prove compliance with safety requirements.

However, the spokesman denied reports that use of menadione posed a serious danger to unborn infants. He said expectant mothers who had taken it in prenatal vitamin capsules should not be alarmed.

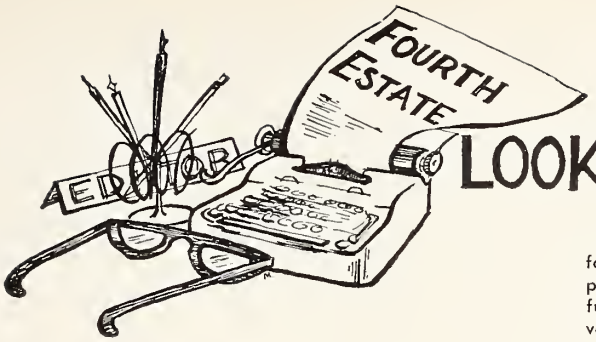
The FDA action followed testimony by Dr. John O. Nester, a pediatrician on the FDA staff, before a Senate Government Operations Subcommittee that use of menadione in prenatal supplements might result in "brain damage, spasticity and death" to some newborn infants.

Nestor charged that the FDA had overruled expert medical opinion and permitted sale of some "new drugs imminently hazardous to the public health."

The FDA denied the charges that its non-medical officials had been allowing potentially dangerous drugs to reach the market.

The FDA said that Dr. Nestor had never informed the agency of his complaints before he made the charge before the subcommittee.

"We categorically deny that laymen have been making medical decisions," the FDA said. ◄



LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentotion fo opinions which oppeor an the editorial pages of the public press, ond which ore of interest to the medical profession. Its function is to review comments which may be favorable or unfavoroble to medicine. Members ore invited to submit editoriol clippings for this column.

Dr. Leonard A. Ensminger

Death of Dr. Leonard A. Ensminger is a distinct loss to Indiana.

Dr. Ensminger was more than a doctor. Along with being a skilled, highly regarded physician and surgeon, he was a top-notch citizen who was an instigator and leader of many things that were good for Indianapolis and the state.

For quite some years he had been an "old-timer" in professional, civic and cultural affairs. But with his many and varied interests he was the sort of "old-timer" every city needs. Always he accepted with alacrity the new ideas of a changing world, pausing only to balance them against the weight of experience for the betterment of all.

Dr. Ensminger was a cheery, kindly soul who did much to make our state a better place to live. Hoosiers will miss him.—*Indianapolis Star,* April 4, 1963.

Take Federal Aid Or Die

The alternative of taking Federal aid or dying is at stake in the administration's plan to put a five percent floor under itemized tax deductions for contributions for educational and charitable purposes.

Therefore, it is good to learn that Indiana Republicans in the House of Representatives have agreed unanimously to oppose the government's plan to destroy some of the incentive for individuals to donate large sums to colleges, universities and churches.

Every one of Indiana's fine privately administered schools would be adversely affected by this latest Federal tax scheme. DePauw University, for instance, estimates that 36% of its institutional cost per student is derived from contributions, endowment gifts and grants. This is true approximately of all the other private or church-operated colleges in the state. Without such gifts these institutions cannot long survive.

The Indiana Republicans in Congress see this not as an attempt to kill off these schools, but rather as another route the Federal long-range planners are taking in an effort ultimately to exert control over all schools—and our churches as well. Their analysis of the situation undoubtedly is correct.

Alumni and friends of Indiana's various privately supported institutions of higher learning have been donating to their support in ever increasing numbers. As a result, building programs and increased enrollment are in evidence in almost every institution.

Now, if the administration has its way, this will stop.

And when this source of income is shut off, these colleges will have no recourse other than the academic slavery of Federal aid.

No individual, no matter how wealthy or how well-intentioned, can afford to make worthwhile contributions to colleges or churches without himself receiving some tax benefaction as a result of the gift.

Consequently, we all should join in backing the Indiana delegation's efforts to halt any proposal that installs a floor under deductions for such worthy and needed donations.—*Indianapolis Star,* April 5, 1963.

Kerr-Mills Veto Has Political Tinge

Governor Matthew Welsh was ill-advised in his veto of Indiana participation in all of the provisions for medical care of the elderly under the so-called Kerr-Mills law.

Almost unnoticed, the General Assembly passed legislation allowing state benefits for those elderly persons who do not have enough income to meet major medical expenses, but still have too much income to qualify for regular welfare department aid. The Federal government would share in the cost, though at a lower rate than that for welfare cases.

The Governor gave administrative complications as the principal reason. That is, the program would require new procedures in addition to those already used by the welfare department.

This may be a factor. However, it should be noted that Governor Welsh is a good Democrat, and the administration is determined to keep medical care for the aged alive as a political issue.

Once again, a bill to provide hospital care for the elderly under Social Security is before Congress. However, no seasoned Washington reporter gives it a ghost of a chance this year. It has to go through the same committees that handle tax matters. Tax reform and rate cuts will take most of the time, and the administration isn't expected to make a serious attempt to get medicare legislation.

That means that for at least another year, many persons who might be eligible for aid in paying hospital bills will have to shoulder the burden themselves.

The state measure will still be needed if the administration manages to pass its medicare program in 1964, the first time it can hope for action. Persons who are not covered by Social Security will still need assistance, and the Kerr-Mills system will remain in operation.

Granted, benefits possible under the law are far from adequate. Nevertheless, they would represent a start. Continued experience would show ways for improvement.

It is strange that this step forward should be blocked by a Democrat—a member of the self-styled party of progress. In the interests of many of Indiana's senior citizens, the General Assembly should override the veto. — *Evansville Courier*, March 23, 1963.

Death That Comes Daily

One day last week a Navy submarine disappeared beneath the Atlantic and the nation waited tensely for word of its fate. On the evening of the second day the Navy officially declared that the vessel and the 129 aboard must be presumed lost.

In an atmosphere of shock, the nation mourned.

On those same two days, assuming they were an average Wednesday and Thursday in April, 161 persons died in traffic accidents. The nation scarcely noticed. Did it, in fact, notice at all?

A board of inquiry on Saturday heard dramatic testimony, including entries from the log of a surface escort vessel, giving details of what is known of the last hour of the submarine and its 129 men.

On that same day, assuming it was an average April Saturday, 147 persons died in the nation's traffic.

We do not draw these comparisons with any slightest thought of minimizing the loss of the 129 aboard the Thresher. We shared the shock and grief. In those days we, too, found ourselves thinking of the 129 dying in the dark depths of the Atlantic, but not of the almost comparable number dying each of those days in the carnage of the highways.

Perhaps it is inescapable in human nature that compassion and concern are deeply stirred by the unusual and spectacular tragedy, while tragedy of far greater dimension goes almost unheeded because it happens a little at a time.

Marked progress in the reduction of traffic deaths probably will not be achieved until people generally decide to give the death on the highway the kind of shocked compassion and anguished concern that are now reserved for such events as the death of the Thresher. It is not that we should be less concerned about the sudden tragedy, but that we should be more concerned about the continuing one.—*Indianapolis Star*, April 16, 1963. ◄

The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 56 — May 1963 — Number 5

Ventricular Aneurysms and Their Surgical Treatment

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THE AVAILABILITY of an effective and relatively safe method for treating ventricular aneurysms surgically makes it advisable to reassess this clinical entity. It is our purpose to describe two cases treated by operative resection and to review briefly the pertinent literature.

Case Reports

Case 1. The patient was a 53-year-old white male who had been in good health until April, 1956, when he was hospitalized for nine days because of shortness of breath and chest pain. A definite diagnosis was apparently not made. On June 6, however, he developed severe precordial pain radiating into both arms associated with respiratory difficulty, a diagnosis of myocardial infarction was made. He was hospitalized at that time for five weeks. A chest x-ray made shortly after admission showed a left ventricular aneurysm.

When he returned to work in December he noted severe angina pectoris with exertion, emotional excitation and eating. In 1957 he underwent a bilateral ligation of the internal mammary arteries with no apparent benefit. In July, 1960, his symptoms became worse with the development of orthopnea, dyspnea on exertion, and almost constant precordial pain. He was no longer able to work and was referred for consideration of operative treatment.

Upon admission on September 27 the physical examination was essentially negative except for a slightly increased anterior-posterior diameter of the chest and moist rales throughout both lung bases posteriorly. Blood pressure was normal, the heart was not enlarged to percussion and no murmur was heard. Routine blood and urine examinations were normal, as was the blood urea nitrogen. An aneurysm involving the anterolateral aspect of the left ventricle approximately 8 cm. in diameter was observed on fluoroscopic and x-ray study (Figure 1). It pulsated paradoxically. The electrocardiogram showed evidence of massive anterior infarction with persistent ST segment elevation in the precordial leads. There was a QT in the AVL and V leads.

Surgery was performed on September 29.

* From the Department of Surgery and the Heart Research Center, Indiana University School of Medicine.

Aided by a Public Health Service research grant (H-203 C5) from the National Heart Institute, National Institutes of Health, Public Health Service and by the Indiana Heart Association.

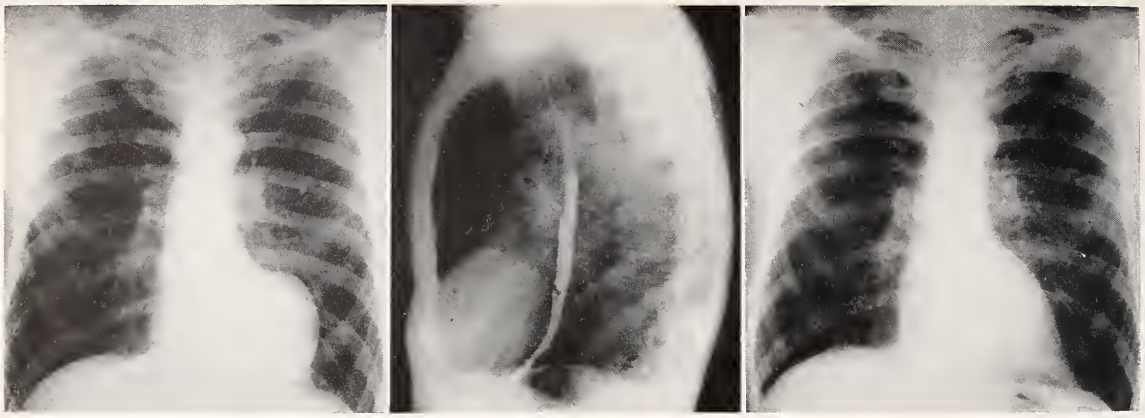


FIGURE 1

PREOPERATIVE (left) and postoperative (right) roentgenograms of Case 1.

An open repair was accomplished utilizing cardiopulmonary bypass, extracorporeal circulation and temporary moderate hypothermia. The heart was exposed through a sternal-splitting incision. The pericardium was adherent to the surface of the aneurysm which occupied the anterior portion of the left ventricle. The aneurysm was approximately 10 cm. long, 8 cm. wide and exhibited paradoxical pulsation. An incision was made in the margin of the aneurysm in the apical area.

Taking care to separate the aneurysm from the underlying thrombus, the incision was extended widely, the large mural thrombus removed and the aneurysm excised. A narrow rim of fibrous tissue was left along the cut surface of the ventricular wall. Repair was accomplished with everting mattress sutures and a second layer of sutures which approximated the everted edges. The repair was begun towards the base of the heart and the ventricle was filled with blood and all air eliminated by the time the last apical suture was tied.

The patient made an uneventful recovery and was discharged on the 12th postoperative day. He returned to work soon afterwards and has continued working except for a period due to hemorrhagic problems incident to his anticoagulant therapy. He has some angina on exertion and takes about one nitroglycerine pill a week. He also has some dyspnea on exertion. Altogether he has been considerably improved.

Case 2. The patient was a 63-year-old white male who had had a myocardial infarction four years earlier. Three months before admission he had developed some dysphagia. An x-ray made at that time revealed a ventricular aneurysm. He had not had any orthopnea, dyspnea nor edema. At the time of admission on July 25, 1961, the physical examination was essentially negative. The heart was not enlarged to percussion and no murmur was heard. There were no evidences of heart failure. Routine blood and urine examinations were normal, as was the blood urea nitrogen. Fluoroscopic, cinefluoroscopic and x-ray study of the heart (Figure 2) revealed an aneurysm of the left ventricle with paradoxical pulsation. The electrocardiograms showed evidence of an old high anterolateral infarction.

Surgery was carried out on July 27. The pericardium was adherent to the aneurysm which was situated somewhat more posteriorly and further away from the apex of the heart than was true of the first case. It was excised in the same manner. The patient's convalescence was uneventful and he left the hospital on the 10th postoperative day.

He has done well and is essentially without complaints. He returned to work in January, 1962.

Discussion

Most ventricular aneurysms are the result of localized myomalacia of the wall of the ventricle following myocardial infarction; they are rarely secondary to trauma.

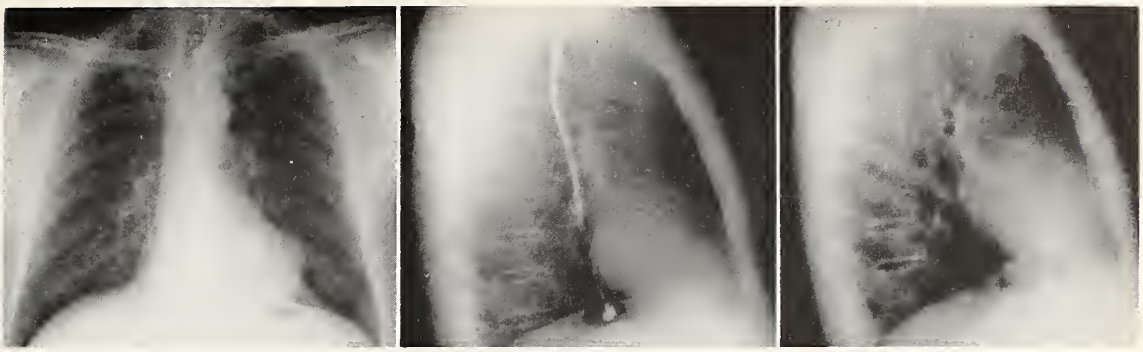


FIGURE 2

PREOPERATIVE (left) and postoperative (right) roentgenograms of Case 2.

Lyons and Perkins[1] successfully excised a left ventricular aneurysm which resulted from a stab wound of the heart 21 years earlier. Also extremely rare is the occurrence of an aneurysm following surgical ventriculotomy. Bailey and his associates,[2] however, observed one case which followed combined mitral and aortic valve surgery and another which was caused by inadvertent surgical rupture of the ventricle during a closed mitral valvulotomy. Both aneurysms were repaired successfully.

Not only have aneurysms rarely been observed following surgical incisions in the hearts of patients, but they were not observed in the ventricular wound healing studies of Warren and his associates.[3] Other rare etiological factors include localized gummatous syphilis, tuberculous caseation, mediastinal abscess, rheumatic myocardial necrosis, mycotic aneurysm developing in patients with septicemia, and aneurysms associated with hypoplastic coronary arteries or anomalous origin of a left coronary from the pulmonary artery.

Congenital Diverticula

Somewhat different from ventricular aneurysms are the unusual congenital diverticula. They are probably caused by fusion of the ventral leaf of the septum transversum with the epimyocardium of the cardiac loop.[4] They are often associated with pericardial defects and ventral hernia. Unlike aneurysms, the congenital diverticula are muscular outpouchings of the ventricular wall and they contract synchronously with the ventricle. They have been observed to pulsate for a time even after the application of a clamp across the base. Apparently the common cause of death is rupture of the diverticulum and physiologic derangements are said not to be usually significant in the absence of other intracardiac abnormalities.

In a classic study of 102 cases proved at autopsy, Schlichter, Hellerstein and Katz[5] found ventricular aneurysms in 1.75% of all cases autopsied and in 20% of all instances of myocardial infarction. In other reports the incidence following myocardial infarction has ranged from 5 to 38%. Combining all the data from many large series with their own, Katz and his associates calculated the over-all incidence to be approximately 15%. Males are affected about four time as frequently as females. The youngest patient reported with ventricular aneurysm following infarction was 29 years of age.

Ventricular aneurysms occur in the most common sites of myocardial infarction. The left ventricle is usually involved and most commonly the apical or anterolateral portions. Right ventricular aneurysms are quite rare. The right ventricle was involved alone only once and the right and left ventricles together three times in Katz's series. The wall of the aneurysm is ordinarily composed of fibrous tissue. Calcification may occur and even ossification. Mural thrombi are very frequently present. The pericardium is usually adherent to the aneurysm. Aneurysms have been noted to develop within a few days after infarction as was apparently true in our first case. Most of those in Katz's cases developed within four years, but one apparently developed ten or more years after the infarction.

The wall of the aneurysm contains no functional muscle fibers and thus bulges outward with each ventricular contraction. One would suppose that ventricular efficiency would be impaired by this paradoxical filling of the aneurysm. It is also intriguing to invoke LaPlace's law in partial explanation of the physiopathologic state. In a simplified form this law might be stated as $P = \frac{T}{R}$ where P is the systolic pressure in the ventricular cavity, T the tension exerted by the ventricular wall and R the radius of the ventricular cavity. If the radius is increased the tension must be raised in order to produce the same pressure.

Furthermore, as Burton has pointed out,[6] even though a dilated heart may be in a state of compensation and by increased force of contraction produce the same pressure in spite of its greater size, there could be a serious loss of cardiac efficiency. This might result from the fact that the total cardiac load and requirement for oxygen depends not only upon the work done in pumping blood but also upon the energy cost of maintaining tension in the heart muscle.

Preliminary observations in our laboratory[7] have demonstrated depression of left ventricular work curves as the consequence of the paradoxical pulsation in experimentally produced aneurysms. They have as yet afforded no demonstrable confirmation of the assumption that simply increasing the diameter of the ventricle impairs ventricular function. It is clear from a number of clinical studies that cardiac output tends to be markedly reduced in cases of ventricular aneurysm.[8, 10]

Rupture of Aneurysm Rare

In Katz's study the terminal stage was dominated by congestive heart failure in 70% of the cases. Congestive heart failure was the main cause of death in 48 and a significant, contributory cause in 21.6%. The prominence of congestive failure in the clinical picture has been noted by others. In Katz's cases recent myocardial infarction was considered to be the sole cause of death in 28.4% and a contributing cause in an additional 27.5% of cases. Thromboembolic phenomena contribute importantly to mortality and morbidity. In Katz's group, for example, thromboembolic phenomena were the main factors in death in 21.7% and a contributing cause in an additional 13.7% of cases. Rupture of the aneurysm apparently occurs rarely. Interestingly enough, in Katz's study the only rupture observed was in a recent ventricular septal aneurysm. It is clear that the over-all prognosis in cases of ventricular aneurysm is poor. Seventy-three percent of Katz's patients had died within three years and 88% within five years. He and his associates were led to conclude that the prognosis was twice as unfavorable as in cases of myocardial infarction not complicated by aneurysm.

There are no signs or symptoms pathognomonic of cardiac aneurysm but a number of observations may lead the examiner to suspect the condition and the diagnosis can be established by certain radiologic and laboratory studies.[11-15] A history of infarction is usually obtainable. Among the prominent symptoms are angina pectoris, congestive heart failure and episodes of embolism. A systolic thrust which may have two points of maximal intensity is not infrequently present. The impulse may feel "wavy" to the examiner. Early systolic murmurs are frequently heard and may be accompanied by a diastolic murmur. Gallop rhythm and a dull first sound are sometimes present.

The electrocardiographic findings are helpful. Though not specific, there is a persistent elevation of the RS-T segment. Deep S waves in leads 2 and 3 have been reported with consistency. Arrhythmias may be present. A ventricular bulge is usually apparent on ordinary chest x-rays. The presence of paradoxical pulsation is confirmatory. Paradoxical pulsations may be evident on ordinary fluoroscopic study and may be demonstrated by roentgenkymography and electrokymography. Angiocardiography is very useful. The paradoxical pulsation is readily evident on cinefluoroscopic study.

Sauerbruch in 1931 was the first to repair a cardiac aneurysm.[16] This was a rare instance of a right ventricular aneurysm in a 28-year-old male. Preoperatively a mediastinal tumor was suspected. A right thoracotomy incision was used. When the cystic mass had been partially freed by dissection, a needle was introduced; on a second effort blood gushed forth. It proved impossible to oversew the needle hole and the opening became larger. The surgeon plugged the hole with his finger, while his assistant placed mattress sutures about the base of the sac. When they were pulled taut the bleeding ceased. It was then possible to open the sac, remove the clot, resect the wall and close the ring in several layers.

The pulse became quite irregular during these maneuvers but gradually the heart recovered good function. The patient recovered from this extraordinary surgical procedure and was allowed out of bed eight weeks later. He was doing well at the time of the report. In 1958 Bailey reported the closed excision of two traumatic and six post-infarction ventricular aneurysms and one congenital diverticulum.[10] One patient died of a thromboembolic complication. Other successful cases have also been reported with the closed technic.[9, 17]

Open Procedure Affords Less Risk

Now that ventricular aneurysms can be removed with the aid of total cardiopulmonary bypass and extracorporeal circulation, it seems remarkable that the results of the closed method were as good as they were. The almost constant presence of a large mural thrombus makes one marvel that it was ever possible to place a clamp across the base of the aneurysm without dislodging portions of the clot and producing emboli. In Cooley's report and the discussions which followed it, 15 open operations are mentioned. There were three deaths.

Our own patients bring this number to 17 cases treated with a mortality of approximately 17.5%. One of the deaths resulted from cerebral embolism and was presumably preventable. The other two deaths occurred in patients 63 years of age with extensive occlusive changes in the right as well as in the left coronary arteries. It would seem that the operative excision of ventricular aneurysms as an open procedure with the aid of cardiopulmonary bypass and extracorporeal circulation should carry a relatively small risk. One judges from the reported experiences and from our own that one should anticipate good results. Improvement or relief of angina has been commonly observed as has improvement in exercise capacity. Since, as Katz and his associates have pointed out, the outlook is twice as unfavorable in cases of ventricular aneurysm as in cases of myocardial infarction without aneurysm, operative resection would appear to be indicated.

Addendum

(Since this manuscript was submitted, we have treated two additional patients, both in their sixties and both much more incapacitated than the first two. Both withstood the operation uneventfully and noted almost immediate improvement in symptoms. One died suddenly some time after discharge of unknown cause. The other has remained remarkably well.)

Conclusions

1. Review of the literature leads to the conclusion that post-infarction ventricular aneurysms occur in approximately 15% of all cases of myocardial infarction and constitute a serious complication, making the outlook far less favorable than in cases of myocardial infarction not complicated by the development of an aneurysm.

2. Our own small experience and that recorded in the literature would suggest that ventricular aneurysms can be excised with relatively little risk as an open procedure with the aid of cardiopulmonary bypass and extracorporeal circulation. Improvement in symptomatology and longer survival should be anticipated.

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From *The Journal* Fifty Years Ago

. . . There are so many abdominal calamities that I shall choose to speak of one which is most common and about which we need frequent stirring up. There is not a man here but will agree that a perforated gastric ulcer should be closed at once if possible. All of you will agree that a perforated gallbladder should be removed or drained at once. Everyone here would consent to an immediate operation in order to sew up intestines through which a bullet had ploughed its way; and the latest national gynecologic meetings have resulted in showing that immediate hemostasis is considered by the leading authorities in America to be the proper treatment in ruptured extrauterine pregnancy.

There is, however, one very common accident which circumstances often convert into a genuine calamity. The accident to which I refer is perforative appendicitis. The circumstances which rob the patient of an early operation make this a calamity. Webster defines a calamity as "any great misfortune or cause of misery." A patient with a perforated appendix and a hesitating physician has been visited by a genuine calamity.

As much as appendicitis has been discussed and as threadbare as the subject is worn, people are still dying of appendicitis in Indiana. Is it because the disease kills instantly? No. It is because appendicitis is not always treated logically as the other abdominal calamities. It is obvious that a perforated stomach should be closed immediately. Why not a perforated appendix, which leads to a far more septic reservoir? Let us quit putting an ice bag on an appendix with a hole in it; let us quit the other time-consuming, impotent measures, which, like amulets, we place on these patients, and have the appendix with a hole in it out within the first 12 hours; for patients so treated recover promptly.

Do not consult next morning, operate tonight. When the hesitating physician ceases to hesitate, appendicitis will cease to be an abdominal calamity and become an unpleasant incident. Many of the cases of perforated appendix come from the great group of patients who suffer from chronic appendicitis. Chronic appendicitis, fecolith, ulceration, perforation is the sequence. These patients should have "interval" appendectomies and thus may calamities be prevented.—Goethe Link, M.D., discussing "Abdominal Calamities"—G. G. Eckhart, M.D., *JISMA,* May, 1913.

Digitalis, Electrolytes and Arrhythmias As Surgical Problems

JAMES W. KILMAN, M.D.*
Indianapolis

THE USE OF DIGITALIS has presented problems to both the internist and the surgeon over the years. The basic objective to be achieved is the same in the surgical and the medical patient. This is the judicious use of digitalis to achieve and maintain optimal cardiac compensation while avoiding the hazards of digitalis overdosage. The basic principles which guide the use of digitalis have been empirical, and we have never achieved a good method of measuring the biological titration of this drug for clinical use.

Surgical patients and their related cardiac conditions present special problems in the use of the cardiac glycosides. This makes it necessary for the well-rounded clinical surgeon to be acquainted with: 1. the use of digitalis, 2. electrocardiographic responses, 3. the effects of various metabolic states on the level of digitalization and 4. the arrhythmias that may be related to digitalis or variation in electrolyte levels.

Cardiac Neuromuscular Responses

The cardiac neuromuscular responses to digitalis, changes in intracellular and extracellular electrolytes and various physical influences is not easy to understand nor can all of these neuromuscular responses be well explained or duplicated in the experimental laboratory. Cardiac neuromuscular responses cannot be measured directly, but the electrocardiogram constitutes an index of the state of the myocardial responses and is therefore, the principal guide in avoiding overdigitalization, arrhythmias and myocardial malfunction due to changes in the ionic medium.

Moore[1] has made an attempt at simplification of cardiac neuromuscular responses by proposing two basic and opposing directions which neuromuscular conditions of irritability and their electrocardiographic changes go, as various forces play upon the heart.

The first direction is the hyperkalemic, hypocalcemic, hyponatremic acidosis and digitalis underdosage complex. The opposite direction is the reverse or inverse of the above and results in depressed S-T segments and U waves by EKG and in the end asystole. Either direction, pursued to its extreme, ends in fatality by arrhythmia.

The surgical patient who is critically digitalized may have one or many of the above factors existent at the same time. It can be seen that these factors can be synergistic and potentiating to increase myocardial irritability. The anesthetic period, the operation itself, and the postoperative period may bring about rapid and frequent changes in one or many of these factors. Cardiac neuromuscular action is not the consequence of the addition or removal of a single ion or factor, but rather the result of the modification in the total organism following a single alteration.[2]

Digitalis Elevates Arterial Pressure

William Withering's discovery and use of the foxglove, when steeped, for the treatment of dropsy in 1785 made him the first proponent of the cardiac glycosides for congestive failure.[3] Withering, in his work, did not realize that the primary effect of digitalis was on the heart. Since the time of Withering, many studies of the mechanism of action of the cardiac glycosides have been done, but there is much that is not yet known about the cellular activity of this drug.[4]

The chemical structure of digitalis involves a cyclopentenophenanthrene nucleus which is similar to cholesterol, the sex hormones, the adrenal hormones, bile acids

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and Vitamin D.[5] The duration of action and the absorption characteristics of a specific digitalis preparation are related to the chemical structure.

Digitalis is rapidly cleared from the blood and bound in tissues.[6] The heart has no greater selectivity for the glycosides than do other organs. The longer acting compounds have a greater tissue tenacity.[7]

Digitalis primarily increases cardiac contractility and efficiency.[8] The secondary effect of the drug is the control of heart rate. This has been shown to be due to vagal and extra vagal activity of the drug.[9] The diuretic action of digitalis is due to improved cardiodynamics, but there is also some direct action on the kidney. Digitalis may act as an anti-aldosterone substance or it may block an enzyme system akin to that blocked by mercurial diuretics.[10]

Ross, Waldhausen and Braunwald,[11] in a well controlled experiment, showed that digitalis gave a direct elevation of arterial pressure by excluding the central cardiac action with the use of cardiopulmonary bypass. This effect was not abolished by ganglionic blockage, adrenalectomy, and not modified by splanchnic arterial ligation.

These same authors showed that in a dog, digitalis induces a generalized venoconstriction most apparent in the hepatic veins. Recently a report was made of 11 cases in which acute hemorrhage and necrosis of the bowel were associated with high doses of digitalis and no shock. There was no mesenteric arterial involvement and no congestive failure in four cases. Hepatic vein constriction and splanchnic congestion were considered as mechanisms by which digitalization produced this situation.[13]

Digitalis is initially concentrated and excreted in the bile. Following intestinal reabsorption and liver detoxification, the major portion of the digitalis is excreted in the urine as metabolites.[7]

There are three clinical situations for the use of digitalis. (1) to control and to prevent paroxysmal ectopic arrhythmias of atrial or nodal origin, (2) to reduce atrioventricular conduction in atrial flutter or fibrillation and (3) to increase the ventricular contractility of the failing heart.[14]

Action of Cardiac Glycosides[15]

	Initial IV	Initial Oral	Maximum	Duration
Digitoxin	1 hr.	1.5 hr.	8 hrs.	18 days
Digoxin	0.25 hr.	0.75 hr.	3 hrs.	5 days
Lanatoside C	0.25 hr.	0.75 hr.	3 hrs.	5 days
Ouabain	5 min.		30 min.	1-4 days

Selzer[16] studied the effect of digoxin on the normal heart by cardiac catheterization of 12 normal subjects. Six of the 12 subjects showed EKG signs of digitalis effect. There was no significant difference in cardiac output, central venous pressure, arterial pressure and cardiac rate before or after the drug.

The determination of the end point of digitalization can be difficult. In atrial fibrillation if a ventricular rate of 80 is maintained with no pulse deficit and if there is acceleration of pulse rate to below 100 with exercise, then adequate digitalization is thought to be present. It may be necessary to digitalize to mild toxicity in the presence of sinus rhythm before a specific requirement can be determined. The digitalis effect on the EKG (inversion of initial portion of the T wave, depression of S-T segment and shortening of Q-T interval) bears no relationship to optimal therapeutic dose.[2]

Many schemes of administration for total digitalization have been outlined and are used. Rapid digitalization is dangerous and only rarely needed. Rapid digitalization in the surgical patient is exceedingly dangerous due to momentary changes in acid-base balance, electrolyte concentration, available energy relationships and calcium-magnesium-potassium relationships.[1] The ideal period of digitalization is a 24-hour period or greater. Heuman and Reich[17] describe a recent scheme using Cedilanid 0.8 mgm IV and oral digitoxin 0.4 mgm on the same day, followed by digitoxin 0.4 mgm the following day and digitoxin 0.2 mgm on the third day, with maintenance doses of digitoxin thereafter. This scheme gives rapid and good clinical results and has been used in a large series of patients with only minimal toxicity.

Few drugs have the narrow range between therapeutic and toxic dosage as does digitalis. When a patient is fully digitalized,

60% of the toxic dose has been given. When a patient exhibits toxic symptoms, 40% of the minimum lethal dose has been given.[2] Standard doses for parenteral digitalis may be near the toxic range. Soffer[18] reports a series of patients intoxicated during initial digitalization only when parenteral methods were used. He relates this to the common error of using a standard dose of parenteral digoxin. Rodensky and Wasserman[19] reported a series of 88 patients exhibiting PVC's, bigeminy, A-V dissociation, first degree heart block, and paroxysmal auricular tachycardia with block as signs of digitalis intoxication in which rapid diuresis with resultant electrolyte imbalance was the most frequent cause of digitalis intoxication.

Overdigitalization is usually heralded by the familiar signs of anorexia, vomiting and rarely, diarrhea. Visual signs may occur. Headache, fatigue, and general malaise may also be present. Arrhythmias of any sort may occur, but the most common is paroxysmal atrial tachycardia with block.[20] Overdigitalization may be produced by (1) too much digitalis (2) hypokalemia (3) alkalosis (4) hypercalcemia (5) hypernatremia (6) hypomagnesemia (7) overdose of insulin (8) combination of any of above.[1] It can be seen that many clinical events may produce hazardous alterations in the degree of digitalization of surgical patients.

The treatment of digitalis intoxication consists of:

(1) discontinuing digitalis
(2) withholding of diuretic measures
(3) restriction of activity
(4) administration of potassium salts
(5) chelation of serum calcium if needed
(6) use of procaine amide for severe cases

Digitalis and Potassium

The administration of potassium usually controls digitalis induced arrhythmias[21, 22] and digitalis induced ectopic beats.[23] This control may be only temporary and exist during periods of relative hyperkalemia. Elimination of ectopic beats by potassium is seldom accompanied by any other EKG changes.[24]

Hypokalemia increases sensitivity of the myocardium to digitalis.[25] Toxic doses of digitalis result in loss of potassium from cells.[26] Digitalis intoxication may occur after diuresis due to loss of potassium and resultant hypokalemia. In one series digitalis intoxication following acute diuresis resulted in an 11% mortality.[19] The injudicious diuresis of the preoperative patient who is digitalized may, therefore, result in increased morbidity or mortality. Fisch[27, 28, 29] and his co-workers have observed on many occasions, both experimentally and clinically, that digitalis toxicity which becomes manifest as a result of potassium depletion may represent an entirely different problem from toxicity due primarily to administration of large doses of digitalis. Potassium may have a non-specific depressing effect on the myocardium.[30, 31]

Hypokalemia in the surgical patient can result from abnormal gastrointestinal losses, diuresis, stress, cortisone administration, administration of glucose or insulin, salt restriction, release of histamine[32] and related shifts in electrolytes. In the digitalized surgical patient, potassium losses should be prevented or replaced as carefully as possible.

Digitalis and Calcium

Ringer's historic studies of cardiac activity showed that calcium affects cardiac muscle by giving a more vigorous systole which can be opposed by potassium.[33] Calcium potentiates digitalis and antagonizes potassium.[34]

Hypocalcemia may be seen in the surgical patient with acute necrotizing pancreatitis[35] and with citrate overdosage. The administration of digitalis in dogs, made hypocalcemic to the point of tetany, reversed the tachycardia and pulsus alterans produced by the hypocalcemia.[36]

Citrate overdosage may occur in massive transfusions where, because of shock, hypothermia or other factors the patient cannot metabolize citrate which in turn binds ionized calcium. In the digitalized surgical patient with hyperkalemia, even small loads of citrate may be fatal due to the decreased calcium effect of antagonizing potassium.[1]

Calcium alone, when given intravenously, can produce the EKG changes seen with digitalis and signs of digitalis toxicity.[37]

Calcium gluconate in chronic doses may cause sinus arrhythmias. Chelation or the binding of calcium by a chelating agent such as trisodium ethylenediamine tetracetate (Na_3EDTA) has been used to reverse digitalis induced arrhythmias, reverse subjective complaints of digitalis intoxication and as a test to determine whether or not a given arrhythmia is due to digitalis intoxication.[38, 39] The results of the use of chelation have been encouraging but not always constant.[37, 40] Potassium is sometimes administered with or following the chelating agent, but only a few patients benefit from combined therapy.[41]

Digitalis and Sodium

Serum sodium decreases in 83% of patients on digitalis.[42] In a study on dogs, the arterial sodium decreased on the average of 2.6 meq/L.[42] There is no evidence that change in serum sodium has any effect on the cardiac action of digitalis.[14] Hyponatremia may exist with hypotonicity and hyperkalemia and act as a potentiating factor in cardiac arrhythmias.

Digitalis and Magnesium

Magnesium acts as an antagonist of calcium and therefore decreases the strength of cardiac muscular contraction.[43] Magnesium does exert an anti-arrhythmic effect on the heart.[44] In animals and clinical situations, magnesium given for digitalis intoxication has not always yielded the same results. This divergence of results may be due to the fact that higher serum levels are required for control of arrhythmias than can be maintained for any length of time without compromise of cardiac function.

The affinity of cardiac muscle for magnesium may reflect the dependence of heart muscle on continuous enzymatic release of oxidative energy.[14] The heart has a greater sensitivity to magnesium deficits than any other tissue.[45]

Hypomagnesemia may exist in surgical patients on prolonged parenteral fluid therapy or on nasogastric suction where losses are 10-20 meg/L.[46] Calcium and magnesium deficits may be confused clinically and are each revived partly by the salts of the other. Losses of magnesium can be relieved by 80-100 meq. of magnesium given parenterally.[47] Magnesium deficiency in such surgical states sensitizes the heart to digitalis. The response to digitalis is as though the patients had been depleted of potassium. When rats are made deficient of magnesium the body potassium content decreases as a parallel occurrence.[48]

Digitalis and Acidosis or Alkalosis

Acute respiratory acidosis is a most threatening event in the postoperative patient due to the paucity of compensating mechanisms. In respiratory acidosis drastic pH changes can occur in minutes. These pH changes increase myocardial irritability.[1]

Metabolic acidosis may occur but may be well compensated and alter cardiac action very little. Acidosis, in general, tends to produce hyperkalemia with a loss of myocardial potassium and increased incidence of arrhythmias,[49] but no data exists on the relation of either metabolic or respiratory acidosis to the state of digitalization.

The postoperative patient, in general, changes to the direction of metabolic alkalosis. The basis for this alkalotic tendency is the post traumatic increase in the reabsorption of sodium bicarbonate from the renal tubular fluid.[50] This alkalosis may be associated with hypokalemia as in pyloric obstruction and pancreatitis. The hypokalemia and alkalosis synergistically increases myocardial irritability and makes the heart more sensitive to digitalis; therefore in the postoperative patient, the same dose of digitalis that was therapeutic prior to surgery may intoxicate the patient.

Digitalis and Glucose Metabolism

Insulin overdosage in a diabetic patient may rapidly change the level of potassium so as to produce a hypokalemia and therefore increase the sensitivity of the myocardium to a given digitalis load.[2] Potassium levels should be carefully maintained in the diabetic surgical patient who is digitalized.

In the critically digitalized patient, oral administration of heavy carbohydrate loads or intravenous administration of glucose may precipitate ventricular premature contractions or ventricular tachycardia.[51]

Special Surgical Problems

The advancement of surgery over the past few years has perhaps extended the classical indications for digitalis in the preoperative, operative and postoperative patient. Patients who are in congestive failure, patients currently compensated but who have been in failure, patients with atrial fibrillation or flutter or patients over 60 with cardiomegaly without symptoms would probably all be digitalized preoperatively by both the internist and surgeon.[14] The special problems to be considered are the open heart surgery candidates and the patients for thoracic surgery over the age of 60.

Circumstances associated with open heart surgical operations such as pentobarbital anesthesia, hyperpotassemia, hypotension, use of vasopressors and anoxia may depress myocardial efficiency and thereby lessen the cardiac reserve. The patient with congenital heart disease or a rheumatic heart defect usually has only a minimal cardiac reserve. Digitalis may be of benefit in such cases.[52] C. Rollins Hanlon and his group[52] recommend prophylactic digitalization three days prior to the procedure. The use of digitalis following the procedure depends on whether signs of failure are present or not.

Myocardial failure is a principle cause of postoperative morbidity and mortality after extended periods of elective cardiac arrest.[53] Preoperative digitalis is probably indicated when cardiac arrest will be extended. Berstein[54] digitalizes all adults, all patients with tetralogy of Fallot and all patients with high pressure ventricular septal defects. He digitalizes the patients prior to surgery, the anesthesiologist gives a maintenance dose at the end of the cardiopulmonary bypass, and an additional maintenance dose is given that night. Rabbino[55] reports on 211 patients with open heart surgery in which 19% developed serious arrhythmias postoperatively. In this group the most serious arrhythmias developed in the patients with signs of failure or insufficient digitalis therapy.

Wheat and Burford[56] reviewed the cases of intrathoracic procedures (non-cardiac) in the world literature and found an incidence of 20-30% cardiac arrhythmias in patients over 60 years of age. These arrhythmias were usually atrial fibrillation or flutter and responded to digitalis. The greatest frequency was following pneumonectomies. They state that with preoperative digitalization, the incidence of cardiac complications in these patients can be reduced to 10%. They recommend that all patients over 60 years of age in whom a major intrathoracic resection is contemplated should be digitalized prophylactically in order to increase survival rate. In another series of 338 patients, 6.3% over 40 years of age developed arrhythmias following noncardiac thoracic surgery. One-third of those who developed arrhythmias in this series died shortly after, despite treatment.[57]

Summary

The administration of digitalis is an important function of the clinical surgeon in the care of his patients. The use of digitalis in the preoperative, operative and postoperative period is not without danger. Clinical events that may produce hazardous alterations in the degree of digitalization of surgical patients are (1) hypokalemic alkalosis (2) vomiting or diarrhea (3) postoperative sodium-potassium shifts (4) citrate toxicity with calcium binding (5) acute respiratory acidosis (6) renal acidosis (7) insulin overdosage (8) large dose of cortisone (anti-insulin effect) (9) spontaneous diuresis (10) induced diuresis (11) calcium intoxication (12) parathyroid intoxication (13) sodium administration.

The classical indications for digitalis in the surgical patient should perhaps be extended to include most candidates for open heart surgery and those patients over 60 years of age who are to undergo major thoracic resections. ◄

Editor's Note

Due to the extensive research work done by Dr. Kilman, his bibliography extended to such length that it was impossible to include his references. They will be included on his reprints.

Case Report and Review of the Literature

Bilateral Congenital Coxa Vara Associated with Osteochondritis Dissecans of the Hip

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WHILE NEITHER COXA VARA nor osteochondritis dissecans of the hip is a rare lesion, the combination of the two lesions is infrequent. The purpose of this paper is to present such a case.

Coxa vara may be defined as a lesion of the proximal femur in which the neck-shaft angle is less than normal. Normally, this angle may be from 110°-140° with the average being approximately 125°. The angle at birth is usually much greater (up to 160°) and thus it is apparent that the angle decreases markedly during growth. An excellent review of the literature on this subject was assembled by Babb, Ghormley and Chatterton.[1]

Congenital coxa vara may be accompanied by a variety of other congenital defects of the lower limb and is frequently bilateral. Duncan[2] has differentiated congenital coxa vara from developmental coxa vara, the latter being defined as coxa vara occurring after the age of four years not associated with other congenital defects. Babb, Ghormley and Chatterton further define congenital coxa vara as a lesion of the upper end of the femur showing an incompletely ossified segment in the neck. This segment is composed of cartilage and osteoid tissue.

The etiology of coxa vara remains obscure. Most authors agree that abnormality of the vascular supply is the causative factor although the exact mechanism of this abnormality is not known. Trueta,[3] in his classic study of the vascular supply of the femoral head, demonstrated that the growing femoral head and neck depend on a highly delicate and specialized blood supply. Morgan and Somerville[4] postulated that the neck-shaft angle was established by unequal growth of the medial and lateral portions of the upper femoral epiphysis during infancy. Duncan agreed that vascular disturbance was the most likely cause, but his finding of the lesion in twins lends support to the genetic factor. Pathological studies seem to add little in determining etiology.

Signs and Symptoms

The clinical picture is fairly typical. The lesion is usually discovered when the infant starts walking, although it may not be recognized until adolescence. Symptoms may occur after rapid growth spurts.

Classical signs are limp, waddling gait, shortening of the affected extremity, prominence of the greater trochanter and limitation of motion (mainly in internal rotation and abduction).

Symptoms include pain and early fatigue. There is usually no gross instability of the hip joint.

Radiographic findings include loss of the head-neck angle, fissures in the neck with the classical triangular defect, "beaking" of the greater trochanter, notching of the ilium just above the acetabulum and a vertical epiphyseal line. If the lesion is discovered during adolescence, the neck defect may have become fused. Hark[5] states that if the neck-shaft angle is less than 90°, pseudoarthrosis will result while those cases with the neck-shaft angle greater than 90° will go on to bony union. The femoral head is within the acetabulum.

In general, this lesion is best treated by surgery. Braces and casts are seldom used except to prevent weight bearing. Various types of osteotomies have been used to re-

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store a normal neck-shaft angle. Subtrochanteric osteotomy seems to give the best results. Peabody,[6] Blount[7] and Horwitz[8] present reviews of this surgical approach.

Osteochondritis Dissecans

Although the typical findings were described by earlier investigators, it remained for Konig, in 1887 to designate the lesion as osteochondritis dissecans.

Osteochondritis dissecans may be defined as aseptic necrosis of a segment of subchondral bone of the long bones of the extremity usually resulting in a osteocartilaginous sequestrum into the affected joint (King and Richards[9]). The condition usually affects males of the second decade with the medial femoral condyle being the most frequent site. It is bilateral in about 20% of the cases.

Osteochondritis dissecans of the hip was described in 1925 by Haenisch. In 1931, Magnin reviewed the literature and concluded that Konig's disease of the hip was an actual entity and was not to be confused with Legg-Calvé-Perthes disease. King and Richards, in 1940, reviewed the literature and found 25 cases to which they added two new cases of their own. Guilleminet and Barbier[10] presented eight cases in 1957.

Various theories have been advanced concerning etiology of osteochondritis dissecans. Circulatory disturbances, trauma, infection, endocrine disturbances and heredity have all been implicated but no definite etiological agent has been proven. The similarity to Legg-Calvé-Perthes disease has led some authors to believe that both entities represent stages of the same disease.

Osteochondritis dissecans of the hip appears to be most common in young adult females although reported cases have ranged from 11-51 years of age. The x-ray findings are sometimes noted bilaterally in cases which are symptomatic on one side only, leading to the conclusion that this condition has a latent phase in which symptoms are entirely absent or transient. Patients usually seek help when a hip or knee becomes painful. At this stage, limp and limitation of motion accompany the pain. The painful phase may last for years with gradual progression into the arthritic or ankylosing phase. By this time chronic pain, limp and severe limitation of motion have arisen.

The diagnosis is made readily by radiological examination. Typically, there is a defect of the superolateral aspect of the head with or without arthritic joint changes. Usually, a sequestrum is noted in this defect. In contrast to osteochondritis dissecans of other sites, osteochondritis dissecans of the hip rarely results in a loose body within the joint.

Guilleminet and Barbier have described in detail the pathological findings. They report that the cartilage overlying the defect is usually intact, although frequently it is discolored, wrinkled and easily depressed. The underlying sequestrum is composed of three layers: an outer layer of cartilage, a middle section of the dead bone and a deeper layer of fibrocartilage.

Although spontaneous healing may occur in a relatively small number of these patients, surgical intervention is recommended by most authors. The lack of spontaneous healing, chronic pain, functional loss and eventual progression of arthritic changes with conservative management have led to various types of surgical therapy. Generally it is agreed that the surgical approach must include dislocation of the head in order to locate the defect, and also must include sequestrectomy. The defect is usually packed with bone chips although various types of arthroplasty have been used. It should be emphasized that results are highly variable and arthrosis may occur in spite of surgical intervention.

Case history—A 14½-year-old colored female was referred by the school nurse because of pain in the knees and hips. The patient had noticed easy fatigability and limping. Symptoms had been present for four years but had become progressively worse during the four months prior to referral. There had been no trauma.

Past medical history was essentially negative. Menarche had been normal at age 13. No serious illnesses or previous hospitalizations were reported. There were no known significant abnormalities in the family.

Physical examination—The patient was a



FIGURE 1

A-P AND LATERAL FILMS token prior to treotment demonstrate the decreose in neck-shoft ongle biloterolly. Note the defect in the right femorol heod.

well developed, well nourished, adolescent female who appeared somewhat short for her age. The physical examination was essentially negative with the exception of the lower extremities. The leg lengths were equal and neurological examination was within normal limits. Range of motion of all joints was normal except the right hip, which had mild limitation of external rotation and abduction. The patient walked with a waddling gait and a Trendelenburg test was positive bilaterally. Mild genu valgum was present bilaterally.

Laboratory—The white blood count was 8250 with a normal differential. Hemoglobin was 14.2 grams, and the hematocrit reading was 36. Examination of the urine was within normal limits and a PPD test was negative. Calcium and phosphorus blood levels were normal.

X-ray — Roentgenograms of the chest, lumbosacral spine, and skull were interpreted as being normal. Examination of the pelvis revealed bilateral coxa vara with a defect in the right femoral head (Figure 1). X-rays of the knees demonstrated slight valgus deformity bilaterally.

Hospital course—The patient was admitted to the Marion County General Hospital on the 18th of July, 1960 and a subtrochanteric osteotomy was performed on the right side using the method of Blount. Approximately three weeks later, the osteotomy was duplicated on the left side. The patient was started on crutches with non-weight bearing on the right leg approximately three months after the osteotomy on the left leg. Nine months after the osteotomy on the right leg, the patient was permitted to bear 25% of the weight on this extremity. The patient was gradually increased to full weight bearing one year postoperatively (Figure 2). At this time the patient was asymptomatic, and with the knees together it was noted that the medial malleoli were 10 cm. apart.

The patient was readmitted on July 17, 1961 for bilateral supercondylar osteotomies to correct the genu valgum deformity. These procedures healed uneventfully and the patient was started on crutch walking with a four-point gait on the 13th of November, 1961. She was gradually progressed to full weight bearing by February, 1962. At this time the patient had normal range of motion in both hips and the Trendelenburg test was negative.



FIGURE 2

FILM TAKEN approximately 11 months ofter the osteotomies. Adequote correction of the coxa vora hod been obtoined ond the defect shows substantiol heoling.

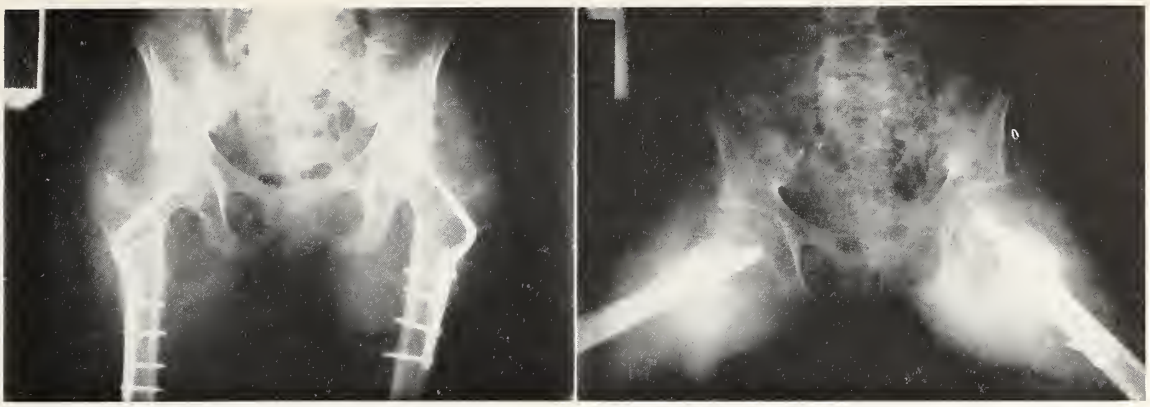


FIGURE 3

A-P AND LATERAL films taken 2/5/62 (approximately 19 manths after the subtrachanteric asteotamies) demanstrate almast camplete restaratian af the right femaral head.

Radiological examination in February, 1962 demonstrated almost complete healing of the defect in the right femoral head (Figure 3).

Discussion

This case is thought to represent bilateral coxa vara with osteochondritis of the right femoral head. Bilateral subtrochanteric osteotomies were performed to correct the coxa vara and the patient was non-weight bearing on the right leg for approximately nine months. Since x-rays disclosed progressive healing of the defect in the right femoral head during this period, no further treatment of this lesion was undertaken. The right leg was protected with partial weight bearing for an additional three months.

Although the author is not suggesting subtrochanteric osteotomy as a method of treatment for osteochondritis dissecans of the hip, it is interesting to note the result in this case. Obviously the period of non-weight bearing may be responsible for the spontaneous healing which occurred but review of the cases reported in the literature would seem to indicate that conservative management generally does not give a comparable result. In view of the short time this patient has been followed, no conclusion concerning long term results can be drawn.

Summary

(1) A case of bilateral coxa vara with osteochondritis of the hip is presented.

(2) Coxa vara and osteochondritis of the hip are discussed briefly.

(3) Treatment of the coxa vara by subtrochanteric osteotomies with non-weight bearing of the osteochondritic hip for nine months with resultant healing of the osteochondritis dissecans is noted.

(4) No attempt is made to suggest subtrochanteric osteotomy as a method of treatment for osteochondritis dissecans of the hip.

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Clinical Estimation and Treatment Of Hypovolemic Shock

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THE PROBLEM of hypovolemic shock is widespread. There are few physicians who are not faced with this important and challenging situation at times. A great deal has been learned about shock and blood loss during the past 30 years. Many of these contributions have come from experimental observations.

The assessment of hypovolemic shock by means of clinical signs and simple clinical measurements has been promoted largely through study of the injured during World War II and the Korean War. An understanding and employment of these principles provides a practical clinical approach to the treatment of this condition. It is the purpose of this presentation to emphasize the relationship between the amount of blood loss and clinical signs and measurements that are easily obtained.

Blood Volume

Estimation or measurement of total blood volume is indispensible to the determination of the volume of blood loss. As in other comparable clinical situations, some generalization is usually adequate to define limits of therapy. The average blood volume in normal adults is listed in Table 1.[9] Multiplication of the body weight in kilograms by this percentage gives the estimated blood volume in liters. The difference between the male and female percentages is due to the lower value of lean body mass and relatively higher amount of adipose tissue in the female. The calculations should be altered according to the habitus of the patient as indicated in Table 1.

Average Blood Volume

Normal:	Male—7% body weight
	Female—6.5% body weight
	Thin—subtract 0.5%
	Muscular—add 0.5%
	Obese—subtract 1.0%

TABLE 1

Minimal Blood Loss

Minimal blood loss connotes loss of 10-15% of the total blood volume[9] and is usually well tolerated (Table 2). This volume is of the order of magnitude that is usually drawn from donors by blood banks. Hemodilution occurs rapidly and is usually complete by 24 hours, or less. It is important to note that any loss in volume of this magnitude is replaced completely to the prehemorrhage level by transcapillary filling. This is not true of greater blood loss. Hemodynamic changes are not remarkable with this reduction of blood volume. Occasionally the diastolic pressure may rise. The renal and endocrine changes which are slight, aid in hemodilution.

The findings that are described as typical for this category and those of greater magnitude refer to acute venous hemorrhage. Differentiation should be made from the acute hemorrhage occurring from the central arterial tree. Relatively smaller vol-

Minimal Hemorrhage (10-15% Blood Volume)

Hemadilution:	Restaration af narmal volume
Hemadynamic:	Pulse and blaad pressure—minimal change
	Diastalic pressure—slight increase
Renal:	Minimal change
Endacrine:	Minimal change

TABLE 2

* From the Department of Surgery and the Heart Research Center, Indiana University School of Medicine and the Veterans Administration Hospital.

Supported by a grant from the Indiana Heart Association.

umes, lost from the latter, produce a more intense systemic response. Fortunately the former more closely approximates most clinical situations.

Moderate Blood Loss

Loss of 20 to 30% of the total blood volume has been designated moderate blood loss[9] (Table 3). This situation is probably poorly treated more often than any other category, with the result that deterioration of the condition of the patient may occur unnecessarily. Ordinarily some change occurs in hemodynamic findings such as lowered systolic pressure, elevated diastolic pressure, tachycardia, and vasoconstriction. A differential renal vasoconstriction with oliguria accompanies the hemodynamic change. Vascular instability in the erect position is the cardinal physical finding of this degree of blood loss. This may be determined by use of a tilt table.[1] (This is a device by which a reclining patient may be changed from a horizontal position to varying degrees of upright position.)

Moderate Hemorrhage (20-30% Blood Volume)

Hemodilution:	Stobilized 15% Initial Volume
Hemodynamic:	Instobility in erect position Tochycordia Vosoconstriction Blood pressure—Systolic; Diostolic
Renol:	Differentiol Renol Vosoconstriction Oligurio
Endocrine:	Morked effect Retention—No; H_2O

TABLE 3

However, a simpler bedside technic employs monitoring the pulse and blood pressure in the supine and sitting or erect position. Vascular instability under these conditions is good evidence of a shortage of 25% or more of the effective circulating volume. It is significant that during the Korean War there was no instance of vascular decompensation following the induction of anesthesia among those patients found to be stable by this test.[1]

This is the degree of hemorrhage necessary to produce the classical compensatory endocrine response to trauma. It is at this level that one observes the effect of increase in adrenal and posterior pituitary function. These compensatory mechanisms result in hemodilution, an attempt to restore a normal and effective blood volume. If the patient is allowed to remain in this condition, if he is otherwise healthy, and if no further trauma, bleeding, or operation supervenes, his clinical status will eventually stabilize. However even when complete hemodilution occurs, the blood volume will be reduced to 15% below the normal or the prehemorrhage level.[9] It is obvious that this is disadvantageous. A relatively minor insult at this time might produce severe decompensation.

Severe Blood Loss

The clinical state of severe blood loss caused by an acute reduction of 30% or more of the total blood volume produces the clinical syndrome called shock[9] (Table 4). It is usually characterized by a decrease in systolic pressure, an increase in diastolic pressure, tachycardia, ashen pallor, sweaty skin, restlessness and decreased urinary output. If the blood volume has been acutely reduced to 50% or more, the clinical situation of "no obtainable blood pressure" is usually evident.

One often speaks of percentage to the neglect of the absolute figure. It might be helpful here to consider absolute values of blood loss that might occur in hypothetical cases. The relative values are listed in Table 5. It is readily apparent that massive blood loss and shock need not be caused by what a casual observer might call a large amount of blood.

Taking-up Phenomenon

One other fact is important in estimating and treating acute blood loss. This is the

Severe Hemorrhage (30-50% Blood Volume)

Produces Clinicol Shock:	Blood pressure—Systolic; Diostolic Tachycordio Ashen pollor Sweoty skin Restlessness Urinary output
50% loss produces "no blood pressure"	

TABLE 4

"taking-up phenomenon."[6] It was originally described in laboratory animals which were allowed to bleed through an arterial cannula into a reservoir suspended two to three feet above the heart until shock levels were

Sex	Female	Male	
Weight (kg)	50	70	85
(lb)	110	154	187
Blood Volume (ml)			
Total	3250	4900	5950
25%	813	1225	1490
30%	975	1470	1780
50%	1625	2450	2970

TABLE 5

reached. If the blood was replaced immediately, the animals were able to regain normal blood pressure and maintain it. If, however, they were allowed to remain for several hours in the hypotensive state, they would gradually "take-up" blood from the reservoir with no change in blood pressure. If the remainder of the blood was then rapidly infused, there was a mild and transient rise in pressure; and the animal eventually succumbed to "irreversible shock." Sequestration of this blood in the splanchnic system has been postulated.

In man an analagous but not identical situation may exist. In these instances it may be necessary to administer up to two and one-half times the normal blood volume to restore adequate peripheral perfusion.[9] This sequestered blood does not pool in the splanchnic area, but rather is thought to be lost in the area of the wound. It is thought to be slowly destroyed and the degradation products excreted.

During the Korean War, blood volume studies in a group of patients treated by massive transfusion revealed the replaced volume did not restore the blood volume to normal in the majority of patients.[7] Only three patients demonstrated evidence of slight over-transfusion. In none of these was there evidence of cardiorespiratory difficulty, nor was the total amount of blood administered accounted for. This concept of massive rapid transfusion can best be summarized by a quotation from the report, "Battle Casualties in Korea."[3]

"The impressions gained from the observations in this report parallel those of the Board for the Study of the Severely Wounded: 'If irreversible shock was present prior to anesthesia, we missed it. If toxins caused any of the shock immediately after the injury, we failed to recognize it.'

A diagnosis of irreversible shock should not be made prior to death. Under the conditions of this study, continued hypotension prior to anesthesia and in the absence of injury to the central nervous system or heart was due to continued hemorrhage or inadequate transfusion."

Treatment

The primary objective in the treatment of hypovolemic shock is to restore adequate perfusion of the peripheral tissues and body organs. This is accomplished by restoration of an effective blood volume starting at the earliest possible moment. In the usual case of acute blood loss, massive blood replacement may be accomplished within an hour or so. It is the rate not the route of administration which is important in resuscitation. An adequate intravenous rate is possible if numerous large cannulae and pressure are used. By use of the proper methods clinically it has been shown that 2500 to 5000 ml. per hour may be easily infused intravenously. This is equal to that possible via the intra-arterial route. Experimentally and clinically intra-arterial transfusion does not improve the results of treatment but does add the risk of peripheral ischemia and possible loss of limb.[2]

After shock has disappeared, all adult patients are able to tolerate at least 500 ml. more blood, but this should be administered at a much slower rate.[4] If a patient is to be taken to surgery, it is important to perform this last maneuver as it will tend to prevent decompensation following induction of anesthesia when the compensatory peripheral vasoconstrictive mechanisms become paralyzed. The use of vasopressors in hypovolemic shock is indicated only under anesthesia. Their use otherwise does not benefit the patient and may actually harm him by further reducing peripheral tissue perfusion. It may also mislead one to replace less

blood than necessary if the clinical signs appear improved temporarily. In the Korean study the use of vasopressors in the treatment of shock did not alter the eventual outcome unless utilized as an adjuvant to anesthesia.[8]

There is a tendency to transfuse elderly patients and those with remote cardiopulmonary disease less vigorously than proposed because of fear that cardiac decompensation may ensue. If these patients are transfused in small increments over a prolonged period, restoration of normal blood volume occurs slowly or not at all. By giving whole blood belatedly after hemodilution occurs, one may cause precisely what one is trying to avoid, namely cardiac decompensation. If one does transfuse after hemodilution occurs, packed cells should be considered. Possibly the only patients liable to develop pulmonary edema as a result of complete restoration of the expected normal blood volume are those who have previously been in cardiac decompensation or those who have respiratory pathology as a result of blast injuries or burns.[4]

Venous pressure does not become elevated in hypovolemic shock unless the condition has existed for many hours and has been treated with massive blood transfusion.[9] Consequently the venous pressure offers a useful tool during the massive administration of blood to patients in whom one is concerned about the cardiovascular status. It is a simple procedure available in any hospital. As long as the patient presents clinical evidence of shock with a normal venous pressure, rapid massive transfusion may be carried out. If the venous pressure begins to rise and it is felt that this is due to myocardial difficulty, rapid digitalization may be accomplished while transfusion is slowed. Transfusion can then be resumed as indicated.[9]

Tachycardia, anemia and hypotension severely affect the previously diseased heart. The danger of these conditions which are associated with shock is at least equal to if not greater than the risk of over-transfusion, provided it is properly monitored by venous pressure measurements. If a patient in hypovolemic shock of unknown duration is treated with the amount of blood estimated to have been lost and remains in shock, transfusion should be continued as long as the venous pressure is normal.[9] The concept of "irreversible shock" in man is never justified. It usually indicates under-transfused shock. In spite of all measures taken, some casualties will succumb with shock still present. In a small number of these cases treated with massive transfusion, pulmonary edema was demonstrated at autopsy.[7]

The best means of evaluating the effect of adequate therapy is by clinical estimation of the adequacy of the circulation. One usually is able to observe reversal of the various clinical manifestations of shock (Table 6). The tilt test or a modification should be included. With adequate replacement of effective circulating volume, the urinary output should approach 25 to 50 cc. an hour in the average adult. If this does not occur after six or eight hours in the face of adequate circulation following restoration of blood volume, one should assume that there is renal damage. It should be treated appropriately.

Clinical Signs

- Blaad Pressure
- Pulse
- Peripheral Circulatian
 - Skin:
 - Colar
 - Temperature
 - Moisture
 - Capillary Refill
 - Renal:
 - Urinary Output
 - Cerebral
- Cardiavascular Stability
- Venaus Pressure

TABLE 6

When the kidney is severely stressed by reduced blood flow and hypoxia, it is exceedingly susceptible to other deleterious factors such as pigment excretion, pre-existent renal disease or dehydration. The occurrence of renal insufficiency is best predicted by the response to transfusion.[7] It is of interest that during 1952 in Korea when more than 60,000 units of blood were administered there were only four cases of post-transfusion hemoglobinuria which required transfer to the renal treatment cen-

ter. The overwhelming portion of the blood administered was type O-positive. The four individuals in whom hemoglobinuria occurred received locally procured, type specific blood.[9]

Summary

Practical, clinical signs and their relationship to reduction in effective circulating blood volume have been presented. Further observations both experimentally and clinically are improving and will continue to improve our understanding and treatment of reduced blood volume. As is often the case in clinical application, generalizations, gross though they may be, constitute a practical aid in instituting and directing therapy. However, there is no substitute for careful and frequent reevaluation of the patient and his response to therapy.

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A Case of Wasted Veracity

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COMMUNICATED HISTORY is often a synthesis of inaccurately and incompletely observed events presented with bias and thoughtful rationalization. In medicine, history taking and evaluation has always been considered the very acme of the art. The old-time general practitioner was the trusted confidant of the family and a pillar of the community not because of the digitalis and opiates he carried in his black bag but because he had the patience to become the father confessor of his charges.

He had the wisdom to *listen* to their tales and the knowledge to act on the winnowed facts he gleaned so patiently. Today, the efficient secretary or junior medical student checks off the yes'es and no's on the printed routine anamnesis sheet; the busy attending professor merely glances at the page as he makes his impressive ward rounds. The results are not always first class.

My introduction to Ania Cherno was dramatically abrupt. The routine afternoon clinic was almost over when a call came through from the emergency room: could I speak Russian? "Why, yes." "Well, then, please wait for us; we will bring a very disturbed patient to you. The Croatian resident thinks she is Russian but he cannot understand her."

Within a couple of minutes, the elevator paused at the third floor; the white-habited sister was steering, gently but firmly, a weeping, distraught woman who was repeating over and over in excellent Russian "Spaseete menia! Ia otravlena!" "Save me! I have been poisoned!" The resident and a student nurse completed the cortege traversing rapidly the wide corridor leading from the anteroom to the examination areas.

The merest cursory glance revealed a remarkably powerfully built, rather youthful, unmistakably Slavic peasant-type woman wearing bargain basement clothes—a rather sleazy coat covered a simple blouse and skirt. The luxuriant brown tresses were coiled into a bun, crowned by a stocking cap.

The long, somewhat flat but straight nose protruded between two widely spread maxillary bones covered by still youthful, taut cheeks that were rosy red, strictly on their own—there was not a trace of makeup either on them or on the full, sensuous lips which barely concealed excellent teeth, obviously all her own. The almost oriental, slanted eyes were brimming with tears which gave added luster to the fear-dilated, brown pupils shaded by long lashes. The tremendous, muscular shoulders and powerful stevedore neck seemed incongruous in juxtaposition with the heaving, feminine bosom barely constrained by the inadequate bra.

She was neat even if on the lower economic level. I restrained her gesturing, well-scrubbed hands lightly, even as I



". . . the white-habited sister was steering, gently but firmly, a weeping, distraught woman. . . ."

started soothing her in her own language. The story tumbled forth in a voluble torrent. She had been a 15-year-old factory apprentice in Kiev, the Ukrainian capital, at the time Hitler's troops stormed into Russia in late 1941. Along with many other thousands, she had been transported to Germany for slave labor. She was very healthy and exceptionally strong; for almost five years she had worked, dawn to dusk, at a factory in Dresden. The food, calorie-wise, was sufficient even if horrible by normal standards; the quarters were drearily minimal but provided survival shelter. The liberating Americans found her physically unharmed even if hungry, dirty and dressed in lousy rags.

In a d.p. camp, she learned the luxury of cleanliness and the comfort of a sated stomach. In the same camp, she met her future husband. He was a former Kuban Cossack officer who had fought under Denikin and Wrangel in the Great Civil War; he was fully 30 years her senior. As a known anti-Red activist, he had fled westward before the advancing Russians. He feared being shot as a collaborator were he to accept the Bolshevik blanket offer of amnesty.

A New Land, A New Life

Nicolai persuaded Ania to marry him; together they emigrated to Argentina, the haven of so many former fascists and Nazis. For a dozen years they resided in La Plata; he obtained a job there as a dyer in a clothing factory owned by a wealthy, White Russian émigré. As they lived practically in a Russian ghetto, she, as well as her Russian-born neighbors, acquired but a smattering of Spanish. In 1956, she gave birth to a healthy baby girl; her cup of happiness was brimming over.

In 1960, her husband was offered a promotion to a foremanship in a New Jersey plant that had been built by the owner of the Argentina factory. Nicolai felt obliged to accept and that is how they found their way to Passaic, across the Hudson from the megalopolis of N. Y. Once again they settled in a tightly segregated Russian community; Russian-speaking friends, pharmacist, and a Viennese refugee doctor who spoke Russian, and—most especially—a Greek Orthodox Church with a Russian sviashchewik, priest.

Arsenical Animosity

Ania had never been sick in her life. Then, two years later (Ania sobbed out), a jealous neighbor had cast covetous eyes on her husband; she had practiced black arts on Ania and had tried to poison her. Ania began having terrible headaches, her hands and feet felt "funny," the entire skin of her body began to dry and crack, sleep became difficult—in short, Ania *knew* that this neighbor was feeding her poison. What was even more terrifying, Ania's darling little 6-year-old daughter also began to say that she was getting headaches; the little girl's skin was also getting dry, blotchy and developing cracks.

This rushing cataract of information poured forth much faster than one could attempt to write. Then, pausing for breath, Ania reached into her handbag and took

out a handful of wadded up $20 bills which she proceeded to force upon me, simultaneously relapsing into the hysterical chant, "Save me! I'm being poisoned!"

This was getting more serious by the minute; Hell's Kitchen was *no* place for a distraught woman speaking not a word of English and flashing a large roll! Could she get back to New Jersey without being mugged? Or even worse? The supervising sister, the social service worker (who had been called) and I went into a huddle—I was loathe to send her to Bellevue or to confine her on our own psychiatric ward. Finally, we arrived at the consensus to place her on the general ward, notifying her husband to come and get her and to give her a thorough check-up in the meantime. I agreed to keep an eye on the proceedings by the residents. Ania's purse and its contents were inventoried on the spot and turned over to the admitting office for safekeeping.

For a variety of irrelevant reasons, her husband could not be reached for several days. During this interval, I made it my business to see Ania every day, if only to give her soothing, verbal reassurance. Massive doses of sedatives and tranquilizers helped. While she was becoming more composed, a really thorough physical, psychiatric and toxicological work-up was undertaken.

The first general impression of overwhelming good health was negated by several tenuous but—when combined—disconcertingly significant findings. True, the usual gross data were entirely normal. Still: the skin of the palms and hands did have some undeniable keratoses. The symptoms of a persisting upper respiratory infection were related and there *was* some coryza, pharyngitis and laryngitis; the eyelids were just the least bit puffy.

Her paresthesias *may* have been on a hysterical basis—but the legs were much weaker than her still muscular arms. The astonishingly feeble tendon reflexes could not be hysterical and her steppage gait was obviously genuine. Cecil and Loeb make nothing of this, but *my* edition of Osler (1944) minces no words on this topic. The headache, vertigo and mental agitation



She had practiced black arts. . . .

could have been emotional although the usually phlegmatic Russian peasant does not throw tantrums. Could it be . . .?

We sent the urine to the laboratory requesting analysis for its content of arsenic; also nail parings and a couple of locks of Ania's hair were sent too just for good measure. The historians are still debating as to whether Napoleon Bonaparte died of arsenical poisoning—I wanted a clear-cut answer for my patient. Within the same afternoon, I had it! The pathologist called up: Yes! Unequivocally, YES! It *was* arsenic—in generous, toxic amounts!

Ania's story had been vindicated to the hilt. She was being poisoned—her original tale insisted on a neighbor—could it be she?

Why, then, poison the child? Anyway, the transparently honest Ania Cherno was NOT lying; it became a matter of real importance to meet the husband and ask him a few, shall we say, searching questions. It could be a matter for the police; though there just might be a much simpler, innocuous explanation.

A Hypocritical Husband

Fortunately, that very evening, I received a phone call from the gentleman in question. He had worked a long week-end and had just received the telegram we had sent.

Could he come and meet me at his wife's bedside? Indeed, he could! Also, would he please bring with him *ALL* the medicines they had in the house? Did they have any genuine enemies? Was his wife agitated for a good reason?

Nicolai kept the appointment punctually; I was already in the hospital. Cherno was an amazingly youthful looking, lithe, lean, thoroughly composed and charmingly handsome man. As he strode towards me, extending his hand for a vigorous clasp as he introduced himself, I was reminded irresistibly of William S. Hart, the hero of the early Westerns. His voice was quiet and dignified; the Russian diction was crisp and clear even if the words had the earthy Cossack tang. This self-possessed, completely confident ex-officer fairly exuded an aura of virile masculinity bringing to mind the lean prairie wolf that still roamed his native Steppes! It was a bit startling!

Yes! Oh, yes! Ania had been acting strangely the last couple of months. But, no; it was not because of any neighbors; it was all his fault. . . .

"Well, you see—I had been married before, at the outbreak of World War I. My wife had given me two sons but I had not heard from them since 1920 when I left the Crimea. As you know, I married Ania after World War II. It is more than two months ago that we received a letter from Soviet Russia. My now grown son had found my present address and written to me. He is now a father himself. Also, I was told that my first wife is still alive. Naturally, Ania knew about my first marriage. However, I had told her that I was a widower—that is how I was able to marry her. Ania is a *very* pious woman; the thought of having lived in sin all these years has really unhinged her mind. Our priest has been reassuring her but she has been inconsolable. Still, I don't believe that she would try and do away with herself, she loves our daughter too much."

"Do you think she will have to be put away?" This final question was put by Nicolai in a very matter of fact tone with only a touch of husbandly solicitude present. One could see that he did not feel really at fault about the situation but was accepting events as they came.

I switched subjects, "Did you bring *ALL* the medicines you have at home or anywhere around?"

Just a Tonic for the Blood . . .

"Oh, yes! Here they are." Indeed, he had with him a fairly large satchel, full of vials, pill-boxes and such. One item caught my eye: it was a two ounce vial with a dropper-type cap. The label stated, "Fowler's Solution,* *one drop* in a glass of water, once a day." The usual poison label graced it. The doctor prescribing it was an Argentinian medico!

I raised my eyebrows as I held this bottle before Nicolai. The reply was prompt and ingenuously disarming. "Oh, our doctor in La Plata gave her this prescription as a tonic for the blood. When Ania started feeling so terribly upset after my son's letter, I saw her taking whole droppersful at a time. I warned her not to overdo it and not to give any to our daughter. You think she was thinking of doing away with our daughter and herself? I know she had the prescription refilled just a couple of weeks ago." The voice did not show overconcern but there was about the proper degree of solicitude for both wife and child.

Nicolai did not seem to be aware of the implications of his statement. History taking *is* an art; sometimes it frustrates, at other times it satisfies. Ania's originally wild and wooly farrago of incredibilities had received quite astonishing verification. I was glad that she had not been sent to Bellevue and I was happy that I had not called the police even if her husband was not exactly a model of husbandly attentiveness. What could one expect of a sabre-slashing savage? And there were easy

* Fowler's Solution is named after the leading 18th century physician who concocted the "tonic" originally. Essentially, it is a 1% solution of arsenic trioxide, As_2O_3, put up as potassium arsenite, $KAsO_2$. The dose *is* ONE drop; some doctors still prescribe it in leukemias and psoriasis. The toxic dose is a mere 100 milligrams: I am surprised that an American trained pharmacist filled this foreign prescription in the first place; that he *RE*-filled it without medical verification is astonishing, indeed!

means of checking the facts gleaned from him.

Such a Charming Couple

The pharmacy was called—oh, yes! The druggist knew the Chernos well: a most well thought of couple—not a breath of scandal. Of course, he would not fill that prescription again—he knew he should not have done so in the first place.

The parish house was my next call. Yes, the Chernos, especially Ania, were faithful members of the flock. The regular priest was ill and expected to be away until Christmas. His substitute spoke Greek and Spanish but no Russian. Well! The story checked here.

Finally, I called the local doctor in whose charge the Cherno child was. He was anxious to tell all he knew. The little girl did not seem unduly ill; did I say check her for arsenic? He had heard of the poisonous effects of various insecticides clinging to fruits but had never encountered a case. He would be delighted to oblige. The man's Russian was almost as good as his English, overladen with a thick Viennese accent. Yes, the Chernos had been seeing him now and then for the last couple of years; a fine couple—and so devoted to their daughter. Well, the story seemed watertight and we could now proceed to treat Ania vigorously.

First, I explained to her carefully that she had been taking too much of her tonic medicine; no one was plotting against either her or her daughter. We had treatments that would cure her completely within the month. Her daughter was being well treated by their family physician and would also be in flourishing health very shortly.

Ania was subjected to intense therapy with such agents as EDTA, BAL and the like. She was purged while being sedated. Also, a series of mild shock treatments were administered. In lieu of her regular priest, I got the Spanish speaking padre to visit her although he was Roman Catholic while Ania was Greek Orthodox. Our patient proceeded to make a rapid and uneventful recovery. The arsenic was out of her system within weeks; all symptoms and signs reverted to normal. I *was* anxious to have a Russian-speaking father confessor talk to her but had to settle for the promise of her own priest as soon as she was back in Passaic.

The end of the year was approaching; Christmas was due the following week. Nicolai informed me that their regular priest would be back on duty that very Sunday. Ania seemed really well although she still brooded frequently over how unhappy her life had been and was. On my hospital rounds, I would make a point of sitting by her bedside and having a chat with my displaced persons camp graduate. I preened myself on my psychoanalytical acumen and my skill in arriving at the truth buried so deeply among so many tangled threads.

The Saturday before Christmas I was at the hospital to see Ania for the last time. Nicolai was there to take her home. Again there was an excuse for not having brought his daughter along; however, the little girl was "just fine." I received the firm promise that both husband and wife would see their priest in their own church the next morning, make confession and receive communion. *After* services, the priest was to call me, and the Chernos would come to my office right after lunch. It seemed to me that I had thought of just about every possible contingency; I felt rather proud of myself.

The next day, Sunday, about noon, there came a call from Passaic. It was not the priest but Nicolai. His voice conveyed a shade of anxiety even if he was composed—"he would be late; would I await his arrival?" "Yes, I would."

It was 3 p.m. before the front door bell rang. It was Nicolai and with him was a strange woman! To my querying glance, he replied with slight embarrassment, "This is the good neighbor widow of whom Ania has spoken—you know."

"Doctor! I am in trouble! You know that Ania was all right last night; she went to bed just fine. At 3 a.m. I awoke and she seemed to be sound asleep. We were supposed to leave for church at eight; I awoke at seven; Ania was not in bed. I went looking for her. She had hanged herself from a rafter in the hall with a clothesline.

"Of course, I had to call the police; this

good neighbor helped me take care of my daughter and—other things." Nicolai was speaking as prosaically as if he was discussing the weather. He pointed at his companion who had been trying to smirk. She now composed her face and piously crossed herself.

A Higher Judge Will Try Them

I just looked at the couple sitting there; my illusory dream of dragons slain, of deeds well done, had vanished in thin air. Poor Ania! How she had trusted me! How totally had I failed her! The poor woman had been *wasting* the *veracity* of her pitiful little tale. That cunning Kuban Cossack had taken me for a ride—but good! How did he and that precious paramour of his start Ania on her colossal arsenical binge? How was it that the clothesline was so handy to the rafter. How was *that* idea planted in simple Ania's mind?

Wisdom to *really* listen to Ania's tale I had lacked; I had *not* given proper weight to the intangibles of the anamnesis; in my smug self-satisfaction, I had failed to discern the total dimensions of Ania's plight and the crushing burden (to her) of her sins. And the hospital record—with a big assist via Nicolai—would bear the lusty lecher out. Anything I could tell the medical examiner NOW would look, shall I say, prejudiced.

Slightly nauseated, I surveyed the concupiscent couple before me. In his own time, God would judge them. Right now, all I could do was to convey to Nicolai, sotto voce, it is true, that I was no longer being taken in. Suppressing my dry grimace of distaste, I put all the hostility I could into my long, hard stare at the pair. Finally, I said witheringly, "The police will check the hospital records, hear the witnesses and conduct their own autopsy. I do not think that I will be called. You did not have to come and tell me all this personally. Let me know whether anything else occurs."

I did not get up as they left; I maintained a stony silence as they took their departure. As I stated in the very opening sentence, "History is often a synthesis of inaccurately and incompletely observed events presented with bias and thoughtful rationalization. . . ."

Mea Culpa! Mea Maxima Culpa! ◄

1270 Fifth Avenue
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Electrocardiogram
of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Krannert Heart Research Institute, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

Mitral Stenosis

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MITRAL STENOSIS with pulmonary hypertension and right ventricular hypertrophy may present a rather characteristic electrocardiographic pattern. Figure 1 is a tracing obtained from a patient with "pure" mitral stenosis before surgery (8-30-62) and again four months after relief of mitral obstruction (1-22-63).

The cardiogram recorded on 8-30-62 shows a normal sinus rhythm. The P wave in standard limb leads is broad and notched and its axis is directed to the left. The major portion of the P wave is negative in V1 and notched in V3-V6. These changes are diagnostic of left atrial enlargement. The right axis deviation of the QRS (about $+135°$), vertical position, clockwise rotation, tall R in V1, with a R/S ratio of infinity are diagnostic of right ventricular hypertrophy.

The postoperative tracing shows a shift of the right axis in the frontal plane toward the left from $+135°$ to about $+85°$. There is almost complete regression of the right ventricular hypertrophy with appearance of left ventricular leads (V4, V5, V6) and a QR pattern in V1. The P wave is less inverted in III and VI and no longer notched in V3-V6. The electrocardiographic changes indicate a satisfactory relief of mitral stenosis.

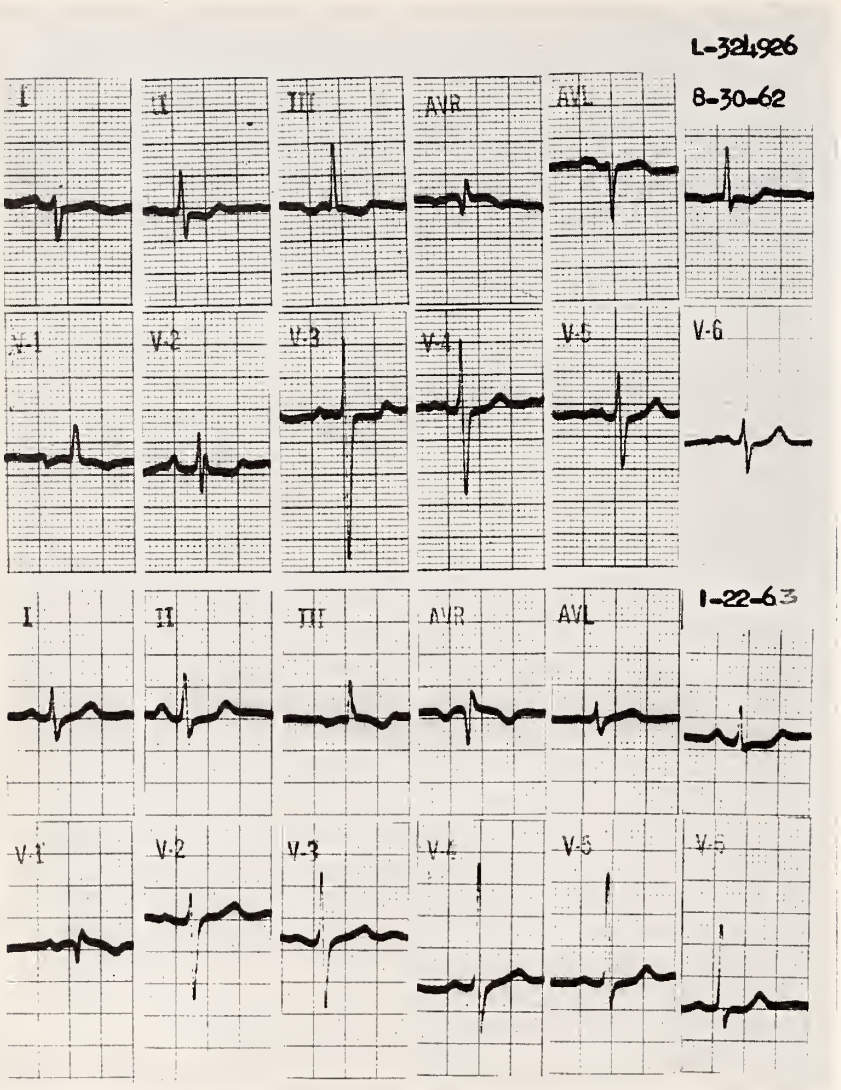


FIGURE 1

THIS FIGURE shows regression of right ventricular hypertrophy following mitral commissurotomy. For details see text.

X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

Villous Adenoma of the Rectosigmoid

*ERICH K. LANG, M.D.**
WILLIAM M. ANSHUTZ, M.D.†
Indianapolis

A 52-YEAR-OLD WHITE male patient presented in the out-patient clinic with the complaint of intermittent bleeding from the rectum. Usually the bleeding episode would follow defecation. Blood did not appear to be intermixed with the stool, but rather a massive amount of blood would tend to follow an apparently normal defecation. There was no pain or other discomfort. The laboratory findings substantiated a chronic, blood loss anemia. Physical examination was unrevealing and, particularly, the digital rectal examination was negative.

The first barium enema was interpreted as negative, however, the fluoroscopist commented on filling defects in the rectum felt to be due to residual fecal material. A re-examination and a barium enema some two weeks later revealed an identical multi-lobulated filling defect in the rectosigmoid. The pliability and distensibility of the rectum and rectosigmoid appeared to be normal. There was no evidence of any constricting lesion or any shelf around this mass. The radiographic picture strongly suggested the diagnosis of a villous adenoma. Subsequent sigmoidoscopy confirmed the radiographic impression.

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The operative specimen showed a classical villous adenoma consisting of multiple small velvety polyps covering a 14 x 18cm. area with grape-like growth. The softness and mobility of these villous polyps was particularly noteworthy and explains the negative digital examination.

Villous adenomas of the rectum and rectosigmoid are lesions that will commonly evade diagnosis by digital examination. The softness and pliability of these villous polyps renders no resistance to the examining finger, and hence makes a diagnosis by this method next to impossible. At times, one of the villous polyps may actually prolapse through the anal sphincter and a diagnosis may be made in this fashion. Occasionally, sigmoidoscopy will fail to reveal lesions in the rectosigmoid junction since the sigmoidoscopist may not have surveyed the area adequately during the extraction of the instrument.

The radiographic appearance of these lesions is very characteristic and air-contrast barium enemas particularly will reveal a grape-like filling defect in the rectosigmoid. Pliability and motility of the rectosigmoid junction portion is always maintained and there is no loss of plasticity or narrowing. Many times the lesion is mistaken for residual fecal material. However, careful re-examination after proper preparation of the bowel will show the defect in



FIGURE 1

NOTE THE HUGE villous tumor of the rectum on the post-evacuation film. The mass changes in shape and adjusts to the contracting bowel wall. A characteristic grape-like pattern is produced by barium caught in the deep clefts between the villous masses.

an identical position and thus establish the correct diagnosis. Pathologically, these tumors tend to be benign.

In a series reported by Hines, eight percent of the villous tumors of the rectum showed invasive carcinoma. Large villous tumors may show invasive carcinoma more frequently. Grossly, the villous tumor is usually a large, broad-based, irregular and poorly demarcated polypoid mass, consisting of innumerable small and large projections piled on top of one another, and arising from one another. The clefts between them produce a striking irregular warty and grape-like surface appearance. Villous tumors are found more frequently in the older age group and may be asymptomatic for many years. Often they are discovered incidentally during sigmoidoscopic or barium enema examinations.

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About Our Cover

Gentlemen, start your engines! With a roar of powerful motors Indianapolis Motor Speedway accelerates into the limelight of the world of sport.

The month of pre-race excitement and activity is over . . . the qualification trials have been completed and the 33 drivers are lined up—the fastest qualifier in the prize position "Sitting on the Pole"—the flag drops and the race is under way, around and around the famous oval for 500 grueling miles.

Thousands of spectators pack the grandstands, many more jam the infield. But also in the infield is a group of men and women who never see the race; they are the 250 doctors and nurses manning the hospitals and aid stations, ready for any emergency that may arise, ready to aid injured spectators or drivers.

The medical organization at Speedway on Race Day is a set-up unique in the world. For this one day it is equipped to handle the equivalent volume of work that would arise in a day's activity in the hospitals of a city comprising a quarter of a million people!

There are two fully equipped hospitals and as many as 14 first-aid tents. The hospitals have divisions reserved for x-ray, EKG, fractures and for surgery. Every branch of medical specialty is represented and a staff of registered nurses is in attendance under the direction of Barbara Webb, Supervisor of Surgery at Methodist Hospital. The first-aid tents, situated at strategic locations, are manned by teams of two doctors and two nurses each.

Dr. Thomas A. Hanna, the Medical Director of Speedway, is in communication with events on the track all through the race, by telephone, air-to-ground radio, police car radio and walkie-talkie. Dr. Andrew C. Offutt, the ambulance dispatcher, is stationed on top of the Control Tower, armed with powerful binoculars. He informs Dr. Hanna, via direct line, of the first signs of impending trouble and from that moment he keeps up a detailed commentary—should the trouble develop into an accident he will inform Dr. Hanna as to the type of accident, angle

of impact, whether fire is present or not, the position of the driver in the car and the handling of the driver by the ambulance attendants (information which gives invaluable indications as to the type of injury sustained, enabling the hospital staff to be even better prepared to receive the patient).

Should the injured person need to be transferred to Methodist Hospital, Dr. Hanna or a member of his staff is able to track the progress of the ambulance into the city through police car and air-to-ground radio. This information is relayed to the staff standing by at Methodist, complete with details of the injury and condition of the patient. Thus valuable time is saved and treatment can be commenced the instant the patient arrives. However, should traffic conditions, either inside Speedway or on the highway, be such that the ambulance may be delayed en route to the city, the hospital in the infield is quite able to give the same intensive care that may be necessary.

This year, for the first time, several helicopters will be added to the fleet of ambulances. They will be used to transport injured patients from the grounds direct to Methodist—one of the parking lots at Methodist will be approved by the F.A.A. for use as a heliport for the day.

Dr. Hanna is not only responsible for the hospital set-up on Race Day; he is hard at work as soon as the track opens for practice and qualifications. He is heavily involved with safety factors . . . checking the fire-proofing of drivers overalls, approving the design of helmets and goggles and also checking the safety devices actually built into the cars. Every driver, after even the most trifling mishap, is required to go to the hospital where he is thoroughly checked before he is allowed to drive again.

These precautions are the main reason that serious injury in this classic race is rare; when one considers that the first race, in 1911, was won at a speed of 74 m.p.h. and that the 1962 race was won at a speed of 140 m.p.h., one would imagine that with the increased speed accidents would be more serious and more frequent. But this is not so, thanks to the diligence of the medical staff and the engineers, the danger of injury has, in actual fact, declined with the increased speed.

There have only been four medical directors since Indianapolis Motor Speedway opened 52 years ago. Dr. Frank Allen served from 1911 until 1936, Dr. E. Rogers Smith held the post from 1937 through 1951 when Dr. Caryle Bohner took over, he served until 1959 when the reins passed to Dr. Thomas A. Hanna. In addition to Dr. Hanna, two other key members of the medical team are Dr. Frederic W. Taylor, assistant medical director on Race Day and Dr. William J. Fitzgerald who is assistant medical director for the pre-race period.

Certainly everything that can be done to minimize the chances of injury to drivers and to spectators is done, all safety regulations are rigidly enforced—but, should an accident occur, aid is rendered instantly by this group of able physicians.

The Journal would like to thank Indianapolis Motor Speedway for making the cover picture available.—M.E.R.

The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

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Paradox in Nursing

AN EDITORIAL, originally published in *The Massachusetts Physician* in December, 1962, under the above title, was reproduced in the editorial pages of *The Journal* of the Indiana State Medical Association in its February, 1963, issue.

The tenor of the editorial was to deprecate the action of the American Nurses' Association in embarking on a program of action to make a baccalaureate degree the basis for a nursing education.

The editorial has produced a welcome reaction on the part of individual nurses in Indiana. One of these reactions prompted a physician to write the American Nurses' Association for more information. The doctor's letter was answered by the Director of Public Relations of the ANA.

Two inaccuracies in the editorial were pointed out. One was that the editorial implied that the new system was to take effect in the near future. The other was that the basic action was taken by the ANA in 1962.*

Nothing was said in the letter to deny the theme of the editorial in regard to the amalgamation of the baccalaureate degree and the RN degree.

The letter set out clearly the action of the ANA House of Delegates in the words of the following paragraph which is quoted verbatim with the permission of the physician to whom it was addressed:

> "In 1960, the ANA House of Delegates *accepted for study* [their emphasis] by its constituent state nurses' associations a proposed goal: 'To insure that, within the next 20-30 years, the education basic to the professional practice of nursing, for those who enter the profession, shall be secured in a program that provides the intellectual, technical and cultural components of both professional and liberal education. Toward this end, the ANA shall promote the *baccalaureate program* so that in due course it becomes the *basic educational foundation* for professional nursing.'" [Emphasis in the last sentence is ours.]

The answer to this is contained in the original editorial: "To be sure, the college-degree nurses fill a distinct niche in the care of patients, especially in advanced technics,

* See Letter to the Editor, p. 590.

administration and teaching; but it is difficult to understand how an additional two years spent in college can make better nurses out of those who wish only to care for sick patients. . . . It is an unfortunate paradox that the more highly trained and educated the nurse, the further removed she becomes from the bedside."

Physicians Still Supplying "Fixes" for Addicts

NARCOTIC ADDICTS are still getting part of their supply from physicians.

With narcotic regulations as strict as they are and with doctors as cagey as they are, it is hard to believe that this is true. However it is vouched for by an agent of the California Bureau of Narcotic Enforcement in an article in a recent issue of *Medical Economics*.

One reason to account for the entrapment of physicians is that addicts are highly organized and usually extraordinarily clever. Groups of addicts collect and exchange information on devious methods of obtaining narcotics, and also inform each other when certain doctors are found to be susceptible to one trick or another.

The telephone routine is one of the most successful tricks, and the safest for the addict. The "patient" describes a recent operation or injury, and accounts for the lack of local medical care by a story of "traveling through" either to reach home or to enter a hospital at some distance. More than just a few physicians have been known to deposit a written prescription at a drug store, even though the "patient" has not been seen or examined.

Addicts who visit the doctor often obtain what they want by recounting a chronic complaint and describing what other physicians (always in another town) have used before to treat them successfully. They are careful to mention the drug in an inaccurate way and still be close enough to indicate the narcotic which is desired.

One of the most easily faked conditions, and one which is especially painful, is the kidney stone. A pricked finger will add a drop of blood to the urine specimen which is passed in the doctor's office, and the diagnosis, short of study in a hospital, is a credible one. The doctor's defense is to insist upon admission to a hospital before prescribing any medication for pain. In the case of an addict, a refusal of hospitalization or a failure to enter after arrangements are made is the universal result.

Prescription blanks should be guarded like a signed blank personal check. Addicts make a practice of visiting a doctor to obtain any kind of prescription and to "lift" a pad of prescription blanks. Any ordinarily good forger can produce dozens of narcotic prescriptions from such a haul.

Altering a prescription is easier than altering a check. In the case of prescriptions for narcotics, the numeral which specifies the amount to be dispensed should be protected against raising. This can be done by prescribing amounts which do not lend themselves so readily to raising. Small numbers such as six or 10 can be changed to a higher though believable amount by adding a zero; 24 is a safer number. Roman numerals are recommended as being difficult to tinker with. All numerals indicating amount should be tightly circled.

Knowledge of addicts' methods is a valuable aid in preventing illegal use of narcotics. Perhaps medical societies should hold "experience meetings" at suitable intervals to enable the physicians to describe all the dodges. All doctors should maintain an active defense against exploitation by addicts. Probably the best defense is a suspicious nature.

Insurance Coverage Affects Office–House Calls

DOES THE TYPE of medical insurance a family carries affect the frequency of trips to the hospital, or the number of times patients see the doctor at his office or in the home?

Medical World News (Dec. 21, 1962) re-

ports on the results of a careful survey by Columbia University School of Public Health to determine answers to questions concerning the relationship of type of medical insurance and the usage to which it is put.

The study was prepared for the Foundation on Employee Health, Medical Care and Welfare and was done with the sponsorship of both labor and management. It required four years, cost a quarter of a million dollars and involved detailed interviews with at least 2,000 families in each of three areas in the country.

Three kinds of health insurance, each one of the best in its group, were selected for the study. New Jersey Blue Cross-Blue Shield represented the service benefit plan tailored primarily for in-hospital care. General Electric's comprehensive major medical plan was chosen as a representative of a broad coverage plan with deductible features and co-insurance. The Kaiser Foundation Health Plan served as an example of a prepaid group practice plan employing its own doctors and owning its own hospitals.

The number of hospital admissions was almost exactly the same for each of the three plans. All were between seven and eight per 100 individuals. The rates were 7.1 under the G. E. plan, 7.6 with Blue Cross, and 7.9 in the Kaiser plan.

The number of days patients were hospitalized were even more uniform—about 60 days per 100 persons under each plan.

The study showed no evidence to support the argument that Blue Cross-Blue Shield encourages hospital admissions because out-of-hospital expenses are not covered.

There was no evidence that the deductible and co-insurance features caused any fewer hospital admissions.

There was no evidence that the Kaiser plan, because of ready availability of diagnosis, treatment and preventive measures, prevents hospitalization.

The one significant difference uncovered by the study showed that the number of office and home visits with doctors varied in direct proportion to the degree to which the charges for these visits were covered by insurance.

Under New Jersey Blue Cross-Blue Shield coverage there was an average of 5.3 visits per year. The General Electric plan averaged 6.2 visits per year, and the Kaiser Plan averaged 7.0 visits.

The average family expense represented by the total of insurance and cash outlay was less with Kaiser—$224 per year. The total was $247 with G. E. and $259 under Blue Cross-Blue Shield.

The report did not attempt to determine the health of the patients nor the efficacy of the medical care obtained with each plan.

Guest Editorials

Ventricular Aneurysms and Their Surgical Treatment

THE VENERABLE 19TH CENTURY surgeon, Billroth, is reported to have dogmatically declared that anyone who dared to operate on the heart was going against the will of God. Now, in the mid-20th century, the cardiovascular surgeons have knocked down the cardiologic walls of Jericho as if they were made of papier-mâché.

An interesting and intriguing report by Doctors Shumacker, Hardin and Nahrwold in this issue of *The Journal* has added to the growing and glowing accomplishments of our surgical confreres. Whereas earlier, embryonic attempts were carried out to correct the post myocardial infarction ventricular aneurysm, the advent and availability of open heart surgical technics have improved and stabilized this operative procedure.

With all new adventures in the surgical field, there is a need to better understand the problem clinically, cardiologically and pathologically. Doctor Donald Effler of the Cleveland Clinic has recently pointed out that the surgical treatment of a ventricular aneurysm must be undertaken with the full realization that the patient has residual coronary arterial disease. The extent of this residual disease is the dominant factor in estimating the prognosis, even if initial

success follows the operation. This would indicate the wisdom of doing an elective coronary arteriographic study as a preoperative method of appraising the coronary arterial system.

Doctor Shumacker's group has again pointed out that rupture is not an ominous feature of this group but that thrombo-embolic complications and mainly cardiac decompensation are the frightening problems. It is obvious that the aneurysm is a fibrotic, inefficient and paradoxically pulsating mass of tissue and medical treatment of the ventricular aneurysm can only support the surrounding myocardium spared by the previous extensive infarction.

A comment might be made regarding the electrocardiographic findings as there is a time factor involved in relationship to the classical, persistently elevated S-T segments noted in the precordial leads roughly overlying the site of the aneurysm. Serial electrocardiograms taken over a period of six months or longer are necessary to make this diagnosis, since it is the *persistently* abnormal S-T segment elevation which is diagnostic of the aneurysm-type pattern. In addition, the presence of a tall R wave in lead AVR is supportive.

In view of the greatly improved surgical ability to correct ventricular aneurysms, it behooves internists and cardiologists to become more adept in the clinical detection of this entity. In addition to the classical radiologic and electrocardiographic findings there are some suggestive physical features. McKusick has described a mid-systolic click which he attributes to the expansion of the aneurysm in early systole. Systolic and diastolic murmurs have been described but are not specific. Perhaps the musical systolic-diastolic murmur has been reported more often than any other auscultatory finding.

Additional physical diagnostic signs are a double precordial pulsation, a diffuse pulsation over the cardiac area involving several intercostal spaces, a myotonic impulse, a cardiac shudder, heaving of the left costal margin, and an area of stony dullness.

The myotonic impulse is a slowness or lag of the up and down movements of the chest wall with each beat of the heart while the patient is recumbent. The cardiac shudder is a double thrust or re-duplication of the cardiac impulse as it is perceived by the palpating hand. It may be described as undulating or wave-like. The heaving of the left costal margin can be seen as an up and down movement of the margin with the patient supine. Finally, the area of stony dullness is obvious and quite similar to that detected over a serous effusion.

It becomes apparent that as the cardiovascular surgeons conquer more worlds in this fascinating field, the referring physician must tighten up his diagnostic belt. He must be aware of the clinical, radiologic and electrocardiographic aspects of ventricular aneurysms. He must appreciate the indications for this procedure which now appear to be the presence of an aneurysm and the existence of poorly controlled left ventricular failure.

Doctor Shumacker and his colleagues are to be complimented on directing our attention to another area where we can offer hope, respite and improvement to our cardiac patients.

A. D. Dennison, Jr., M.D.
Alan E. Beer, M.D.
Indianapolis

I-HOPE Girds Up for Battle

THE INDIANA HEALTH Organization for Political Education—I-HOPE—faces a challenging year in 1963 as it "tools up" for the months ahead leading to the general elections in 1964.

Major effort will be made in the direction of political education and orientation of physicians, their wives and allies geared to the proposition that those in and around the medical profession must, of necessity, have a new awareness of the extreme importance of practical politics at the precinct level—the real "grass roots" where elections are won or lost.

The 28-member board of directors of I-HOPE has plans for a series of meetings throughout the eleven Congressional districts featuring slide and film presentations,

discussion groups and key speakers to bring home the story of political activity at the precinct level.

A major part of this program will, in all probability, concern itself with the "barnstormer" course of political education devised by the American Medical Political Action Committee—AMPAC.

I-HOPE had a successful record in the 1962 campaign when it backed seven winning Indiana Congressional candidates. All of these winners have written to I-HOPE, expressing their thanks and appreciation for the support which they received.

One significant statement from an Indiana Congressman pointed out that: "I can say in all sincerity that I-HOPE fills a void which has too long existed in conservative ranks . . . it is no exaggeration to say that without the support of I-HOPE my campaign for re-election would have been hindered and my victory doubtful. . . ."

The I-HOPE program is completely voluntary, but thus far some 1,500 Indiana physicians have become members and their gifts have averaged nearly $50.00. A gift of $35.00 or more provides the donor with automatic membership in AMPAC.

Joseph Palmer

Editorial Notes . . .

Major medical expense insurance has been for several years and is now the most rapidly expanding form of health coverage. About 38 million Americans are so covered. In 1962, two out of every three employees issued group insurance were protected by major medical. The exact figure for 1962 was 66% as compared with 61% in 1961. From 1957 to 1961, the payments made under major medical policies quadrupled to $576 million. Most major medical policies cover practically all medical expenses, both in and out of a hospital, including special nurses. It is relatively inexpensive because it protects against contingencies which, while they are catastrophically expensive, occur so seldom as to be inexpensive when spread over a large covered group.

Indiana Blue Shield set three new records during the year 1962; highest number of members ever (1,469,670); largest amount of money ever paid to doctors ($20,724,436); and the lowest operating cost (7.2% of income).

The VA policy of caring for chronic mental patients in home-like surroundings, as often as is possible, is meeting with increasing success. In 1962 almost 5,100 such patients lived in foster homes, half-way houses and nursing homes. This gave the equivalent of ten 500-bed mental hospitals to the VA, and provided much more effective treatment to the patients. When a patient has progressed to maximum improvement in a mental hospital and has no suitable home of his own in which to continue convalescence, carefully selected foster homes and half-way houses provide a stepping stone back to responsible normal living.

SCRIPTSTARTER, a new drug sampling technique of Ames Company of Elkhart, is catching on and proving to be a fine idea. Pre-printed prescriptions are provided the physician and when he wishes to prescribe the product so detailed, he fills in the patient's name. The prescription is then filled without cost to the patient at the patient's customary pharmacy. Result: The physician is not loaded down with samples which may be stolen or may deteriorate, and for which he may have no use. The patient maintains a normal relation with his pharmacist. The pharmacist sends the duplicate of the SCRIPTSTARTER to Ames who reimburses him for the material.

The wholesale price of prescription drugs in 1962 represented a decline over 1961. This is the fourth straight year that a decline in price level has occurred. The drug price index is determined by a process which weighs the ingredients in accordance with consumer usage. Wholesale price of drugs has declined since 1949 by 12.9%, while the Consumer Price Index has risen by 29%. The decline last year was due mostly to reductions in prices of antibiotics. Vitamins,

hormones and dermatological products also declined but less spectacularly.

Nursing homes should have automatic sprinkler protection against fire. The National Fire Protection Association is considering revising its standards to include automatic sprinklers in nursing homes. Also scheduled is consideration of changes in specifications for rubbish and linen chutes.

New strains of staphylococci were doubled in children treated by antibiotics in rural New York state, as reported in *JAMA* on March 30. Nasal cultures taken on children with and without antibiotic treatment showed almost exactly twice as many new types of staph in the treated group. No sensitive strain was observed to become resistant during the therapy, and the new strains did not appear to have been acquired from other members of the family or from the hospital.

Hospital and related construction proceeded in 1962 at an average daily cost of $3.6 million. This is a 14.3% increase over 1961 for hospital, nursing home and other health-related institutional building. Seven out of every ten dollars spent on hospital construction last year came from private capital. There has been a big shift in hospital building finances from public to private funds since 1952, when the private finance share was only 44.3%. ◄

British Choice

. . . The comment that "the family doctor is on his way out" has been expressed (in as many words) on innumerable occasions since the Health Service was introduced in 1948. There is little doubt that the tendency has been constantly to increase the size of practices and, at the same time, to restrict the content of the work done. The more patients seen at surgeries and the more calls that are made on a doctor's time, the more it is necessary to refer to out-patient and casualty departments.

Many of the investigations and routine procedures which would be carried out as a matter of course by a general practitioner abroad are often delegated to the hospital or local authority services in this country. Many family doctors practice without secretarial or nursing help, which not only reduces efficiency, but means that time which could be devoted to giving general advice to the confused, and simple psychotherapy to the disturbed, must be spent in performing routine tasks which could be carried out by any office junior or probationer nurse.

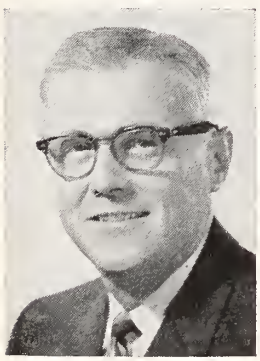
One hears reports of busy practices in some of our larger cities where (in this day and age) even the stethoscope, syringe and thermometer are rarely used; not because the doctors are inadequately trained—but because there just is not time. The most important requisite in such practices is sufficient clinical acumen to recognize serious illness and the need to refer to hospital or specialist. This may be National Health medicine, but it is not good family doctoring. . . . A. Geoffrey Dawrant, M.B. "Choice in Saskatchewan and in Britain" *Fellowship for Freedom in Medicine Bulletin*, January, 1963.

President's Page

1963 LEGISLATURE

As this is being written, the 1963 Indiana State Legislature has been in session 90 days. Considerable abuse and criticism have been heaped upon the legislators for their failure to solve the problems of re-apportionment, a satisfactory budget and tax increases to support the budget. It is implied that nothing has been accomplished to date by the legislature.

From our standpoint, much has been accomplished. For the first time in many years the legislative program of the Indiana State Medical Association—bills supported and bills sponsored—has been approved by the legislature in its entirety.



By way of illustration, there were 40 bills which the profession actively supported or favored and all of them were passed. Contrariwise, there were 25 measures which the profession opposed. All of them were defeated.

Major favorable medical measures which passed both houses included: Kerr-Mills implementation; mandatory installation of seat belts; mandatory testing of persons suspected of having tuberculosis who refuse to be checked by established voluntary methods; permissive legislation to allow physicians to serve as members of four-man county hospital boards; the "good Samaritan" bill under which physicians may treat persons injured in accidents without direct threat of malpractice action; a measure permitting the formation of medical corporations; a bill to provide unified licensure for nursing homes, church or lodge supported homes and county homes if they desire to be included; a measure calling for confidentiality of hospital records; legislation granting temporary medical permits for interns and residents who come to Indiana from other areas for graduate training and a bill to outlaw tattooing in Indiana.

This favorable record in the General Assembly implies cooperation and understanding of our problems by the majority of the legislators.

It is unfortunate for the taxpayers and needy older citizens of the state of Indiana that the Governor chose to veto the most important bill which we sponsored, Senate Bill 132—Kerr-Mills implementation. He cited as his main reasons for veto that he felt the need did not exist and that the state and county welfare directors stated that it would be unwieldly and difficult to administer. He failed to acknowledge that the national program which his party supports would cost at least 12 times as much, would not furnish as much in the way of benefits to those in greatest need, and surely would be much more costly and unwieldly from the administrative standpoint.

Our sincere thanks go to those legislators who listened to our problems and supported our programs in the legislature. The members of our Commission on Legislation devoted much time and effort, both prior to and during the regular session of legislature, to the study of bills introduced and in formulating a positive program. Members of our headquarters staff—Bob Amick, Howard Grindstaff, Joe Palmer, and Jim Waggener—performed yeoman service in contacting legislators, furnishing information and background material and in having constitutents of the legislators in contact when needed. Our attorney, Mr. Robert Hollowell, was a tower of strength.

We are especially grateful and proud of the two physicians who served in the legis-

lature: Senator James Kirtley of Crawfordsville and Representative Otis Bowen of Bremen. They proved to be outstanding members of the legislature from all standpoints and were especially helpful in supporting our programs. These are sincere men who accepted the responsibilities of being legislators at great sacrifice of their time and to their medical practices. I would like to reproduce here the creed which Dr. Bowen keeps on his desk:

"No. 1—I shall study both sides of the question.

No. 2—I shall solicit and listen to the information and desires of the people from my county.

No. 3—I shall ask myself the following questions:

(a) Is it morally right?
(b) Is it good for my county and the state of Indiana?
(c) Will it furnish the greatest good to the greatest number?
(d) Who will it hurt? How much? What can be done to remedy it?
(e) Does it conform to rules of good sound judgment and economic principles?

No. 4—After this preparation, study and guidance, I shall vote according to my own reasoning and the dictates of my conscience."

I think the important thing we learn is that to have good government we must deserve it and we must work at it. We must take more active personal interest in government, from the local to the national level. We must be active in the party of our choice and give leadership on those problems about which we are the most knowledgeable. We must be active in obtaining and supporting candidates in the primaries who are capable and vigorous and who support programs which are fiscally sound and for the true benefit of all our people. If we could obtain people who would follow the above creed, we would have fewer problems when our commission members and staff face legislative bodies and would not be so apt to have important legislation which has passed both houses, face a veto, possibly on party lines or on an unsubstantial basis.

Maurice E. Stocke

The Woman's Auxiliary

REPORTS TO ISMA

The accomplishments of our auxiliary year 1962-63 have not been compiled at this writing, and our plans for the coming year are in the formative stage. Although we may change the points of emphasis with the change of most of our officers and committee chairmen, our objectives remain the same:

(1) To unite in one organization the wives of members of the Indiana State Medical Association:

We are continually working to increase our membership. Our goal—every doctors' wife an auxiliary member and all counties organized auxiliaries.

(2) To assist the Indiana State Medical Association in its program for the advancement of medicine and public health:



Our members have devoted much time and effort to the recruitment of nurses and allied workers in the medical field. Many auxiliaries give scholarships under the Health Careers program. We are active in the safety, civil defense, community service and mental health programs. Some of our county auxiliaries sponsor rural health meetings and Health Fairs. Enthusiastic cooperation was received from the auxiliaries to our new project, International Health Activities.

Our program on AMA-ERF is no small one. All our auxiliaries participate with contributions—some with direct contributions and the use of memorial cards—others with money-making projects. The proceeds from the sale of Christmas cards have increased yearly.

(3) To participate in any endeavor, on request of the Indiana State Medical Association:

Our members are kept informed on all legislation concerning the medical profession. Many of the counties have study groups in order to familiarize themselves with the issues in any proposed legislation that would prove inimical to the best interests of the medical profession. The year ahead will be a busy one in the legislative field and we are ready and able to assist in any way we are asked to by the medical association.

(4) To coordinate and advise concerning the activities of constituent auxiliaries:

The state president keeps in contact with each county president by correspondence. She also visits the county auxiliaries when invited and would like to visit each auxiliary sometime during the year.

The state chairmen also are in direct contact with the corresponding county chairmen at pertinent times during the year.

(5) To cultivate friendly relations and promote mutual understanding among physicians' families.

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Glaucoma; severe cardiac disease.

Possible Side Actions:
Xerostomia, mydriasis and, occasionally, hesitancy in urination. Theoretically, a curare-like action may occur.

1. Asher, L. M.: The Choice of Anticholinergic Drugs in the Treatment of Functional Digestive Diseases, Amer. J. Dig. Dis. 4:260-275 (April) 1959.

California Merger

A. W. CAVINS, M.D.
Terre Haute

In November an historic merger occurred in the Golden State—one which, we daresay, will probably not receive the scrutiny of the anti-trust sleuths. We refer to the settlement of the osteopath issue in California, as reported in *California Medicine*, January, 1963. Excerpts from the leading editorial follow:

"On November 6 the voters of California voted overwhelmingly in support of the unification of the medical and osteopathic professions in California. By latest count, not yet made official by the secretary of state, Proposition 22 rolled up 3,278,257 affirmative votes, more than double the 1,401,158 votes cast in opposition.

* * * *

"The entire program of unification was laid out in black and white just two years ago. It has proceeded, step by step, through this final stage, the affirmation by the people. Each step was successful, in line with the original proposal, and each led, inevitably it now appears, to culmination in the successful public ballot.

"In review, Proposition 22 transfers the licensing and regulation of all M.D.'s to the State Board of Medical Examiners, stops any further licensing of osteopaths in California, allows amendments to the osteopathic licensing act by the Legislature and provides for dissolution of the osteopathic board when its licensees decline to 40.

"Thus ends the era of duplicate licensing of physicians and surgeons in California by two separate boards."

The editor goes on to emphasize some of the rough spots on the road to success, and also:

". . . that the national osteopathic organization fought with all its vigor against the joining of the two professional groups. Doubtless the handwriting appeared on the wall, probably in capital letters, when the California Osteopathic Association, representing about one-fifth of the national membership, was turned out of the national group because it favored unification.

"The message on the wall would seem to be growing in strength and length at this time, when it is reported that ten other states are moving in the direction of improved relations between medicine and osteopathy. In the past 18 months there has been activity in this regard in New Jersey, Delaware, Ohio, Missouri, New York, Washington, Tennessee, South Dakota and Iowa.

"Proposals in these states have ranged from simple statements of mutual recognition to the promotion of programs patterned on our own. From these plans there is bound to emerge a diminution of the real or fancied differences between the two schools and a closer liaison, for the good of the public, between the medical and osteopathic groups.

* * * *

"There remain several problems to be solved before all differences are completely removed in California. Such questions as component society membership and specialty certification are still to be answered. These matters were recognized at all times during the long planning of the California unification but were put aside until the more important philosophical and legal aspects could be resolved. Now that the people of the state have spoken, there appears to be ample reason for optimism in the solution of the remaining problems."

This whole matter is of such great interest and importance to the medical profession that it is reported here, albeit without comment, for Hoosier physicians to ponder. It will be indeed interesting to see how the remaining problems, outlined in the last paragraph, are solved. ◄

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Physicians Give Answers to Health Problems in Shelby County Health Day

The traditional doctor-patient relationship got a real "booster shot" recently in Indiana's Shelby county.

Members of the Shelby County Medical Society, its auxiliary and other Indiana physicians cooperated February 27 to put on a Health Day program there as a public service.

A total of 16 physicians took part in a half-dozen separate panel discussions on subjects of general importance and interest —then participated in question and answer periods following each discussion.

Besides bringing to the audience valuable health information in understandable terms, the program served to enhance the doctor-patient relationship which has suffered somewhat in the rush and pressures of modern-day living.

This year the panel discussion program concerned the topics of cancer, tuberculosis, child health, modern-day tensions, civil defense and heart diseases.

The state TB Association had a mobile unit stationed at the Pearson school and free x-rays were taken. A heart display was arranged under the direction of Dr. V. Brown Scott. There were also displays showing what the contributions to the Shelby County United Fund (SCUFFY) were being used for.

Speakers from the Shelby County Medical Society included: Drs. Paul Inlow, William Green, William R. Tindall, Joseph Moheban, Robert D. Spindler, Roger F. Whitcomb, Wilson L. Dalton, Lucian A. Arata, James H. Tower, John A. Davis, Herbert H. Inlow, V. Brown Scott, David B. Silbert and Rufus M. Nigh.

Out-of-city speakers were Drs. Dwight Schuster and Winfield Scott, both of Indianapolis.

Medical society auxiliary members in charge of the preparations were Mrs. Paul Inlow, Mrs. Dalton, Mrs. Tindall and Mrs. Richard. ◄

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Letter

to the editor

To the Editor:

March 18, 1963.

In the February, 1963, issue of *The Journal* of the Indiana Medical Association, an article entitled "Paradox in Nursing" was reprinted from the *Massachusetts Physician,* Vol. XXL, No. 4, December, 1962.

The opening statement, "Henceforth the title R.N. must be based on a degree from an accredited university" is not a true statement. There are two-year associate degree programs, three-year diploma programs, and four-year baccalaureate degree programs in nursing education today. Graduates from ALL these programs are entitled to write state board examinations and, if successful, be issued a license as an R.N.

The second statement, "So stated the American Nurses' Association at its 1962 convention in Detroit" is also in error. As one who attended this convention, I was not aware that such action had taken place. A careful re-reading of the *1962 Proceedings of the House of Delegates of the American Nurses' Association* convention failed to disclose that such action was recorded.

At the 1960 ANA convention in Miami Beach, the Committee on Current and Long Term Goals submitted a report containing a proposal for a goal on the educational preparation of professional nurses. This was accepted for *study.* Discussion on the proposal indicated that the members of the American Nurses' Association are vitally concerned with both the quantity of professional nurses and the quality of their services. No further action has taken place on this proposal since it was accepted for study in 1960. ◄

Marie D'Andrea Loftus, R.N.
President
Indiana State Nurses' Assn.

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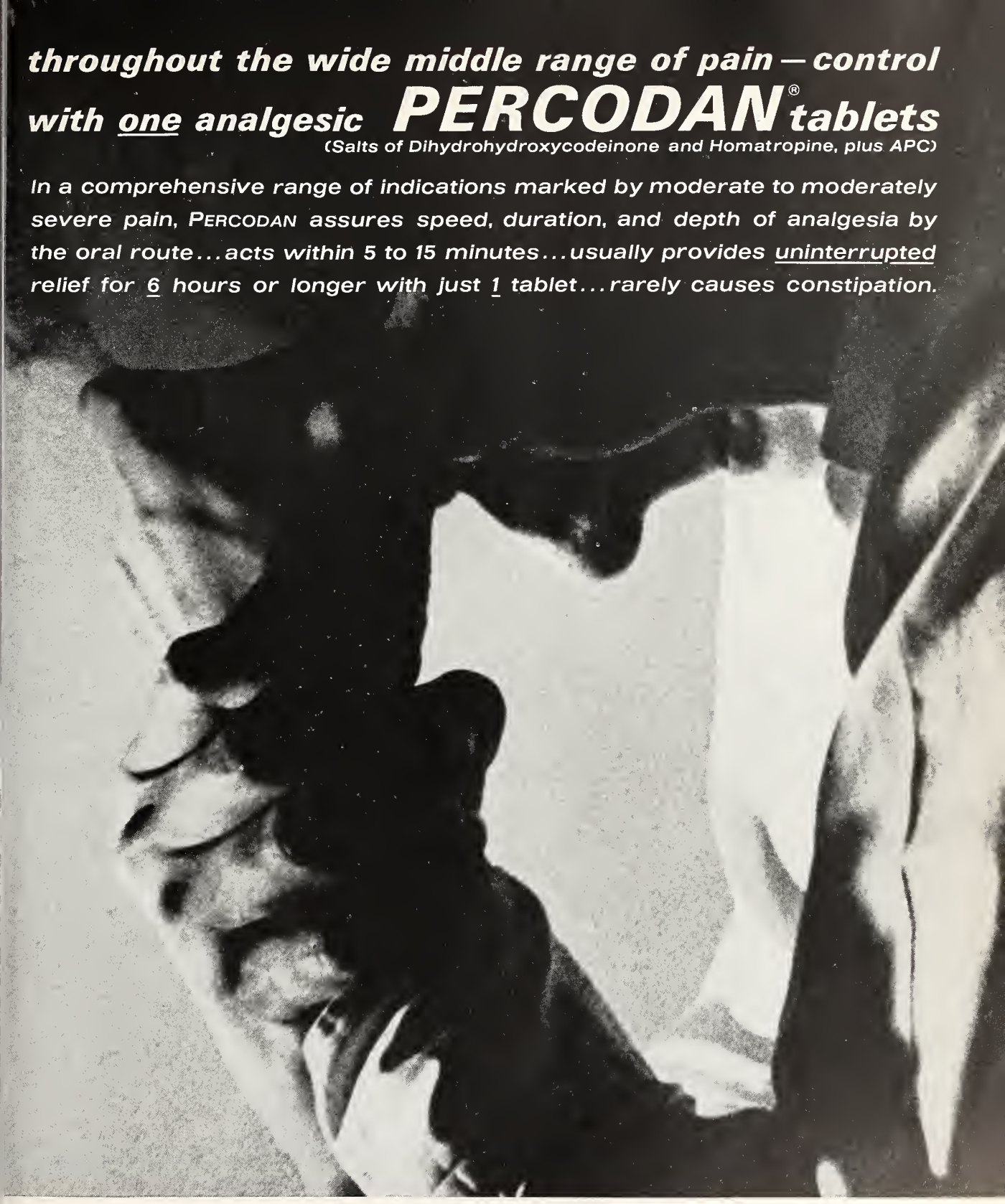
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Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Hospital Held Liable for Negligent Care of Patient in Emergency Room—A judgment of $10,000, granted to the widow and the two minor children of an emergency room patient who died because of negligent treatment by the hospital's employees, was affirmed on appeal by the Mississippi Supreme Court.

The patient suffered a shotgun wound in his left arm which caused profuse bleeding. He was picked up by an ambulance and carried into the emergency room of the defendant hospital. On two occasions nurses entered the room and saw how much the patient was bleeding, but just walked away and left him unattended on the emergency room table. Even the simplest precautions to diminish the bleeding were not taken. The patient was removed by ambulance to the VA Hospital where he died within a few hours. The autopsy revealed that the sole cause of death was hemorrhage with resultant shock. The court held that the hospital's employees, the nurses, were negligent, and that such negligence constituted a contributing cause of the patient's death.

The court said that a nurse on a hospital staff is considered an employee, and the hospital is liable to a patient who suffers injury through her negligence while acting within the scope of her employment. The court added that although the hospital is not an insurer, "it is liable where it is chargeable with negligence which constitutes a contributing, proximate cause of the patient's injury."

New Biloxi Hospital v. Frazier, 146 So. 2d 882 (Miss., Nov. 26, 1962).

Test for Total Disability is in Ability to Work at Gainful Employment—An employee injured in an industrial accident lost his appeal to modify the award of the Industrial Accident Board. The Supreme Court of Idaho held that the test of whether the employee suffered total disability was not whether he would be able to work at the same position as that in which he was injured but was whether he had ability after injury to work at any gainful employment.

The claimant was employed as a lineman for the telephone company when, in the course of his employment, the pole broke and fell to the ground, fracturing his back and left ankle and causing other injuries. Medical testimony showed that the employee would never again be able to work eight hours a day at manual labor, and could not return to his former occupation. However, the court said, "this is not the test for total disability. The ultimate test is ability to work at gainful employment." As claimant had found employment both as a janitor and a bus driver subsequent to the accident, the court ruled that he was not totally and permanently disabled, but his disability was partial only.

Lane v. General Telephone Company of the Northwest, 376 P. 2d 198 (Idaho, Nov. 15, 1962).

Circumstantial Evidence Permits Jury to Decide Whether Cast Was Too Tight—The absence of direct medical evidence that neg-

ligence in applying a cast too tightly caused gangrene which necessitated amputation of a patient's foot did not preclude submission of the patient's claim to a jury. An intermediate appellate court in Florida remanded the case for consideration by a jury.

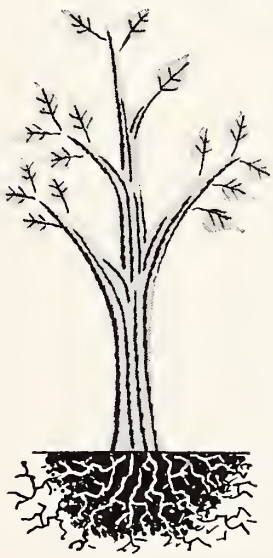
The cast was applied to the patient's leg for fractures of the tibia and fibula following an accident which also caused an excoriated and abraded area on the surface of the leg. The patient complained of pain continually until the cast was removed. Gangrene developed and the foot had to be amputated.

Medical testimony presented by the attending physician showed that gangrene could develop from a cast being too tight. The opinion of the medical witnesses, however, was that the gangrene had developed because of the trauma, not because of the cast. These witnesses also testified that the treatment was in accord with good medical practice. The hospital records and affidavits of laymen showed the patient's continuing complaints, the continuing cold, cyanotic, edematous, and sensation-impaired status of his foot, and the fact that partial relief was afforded by easing the cast. The court held that this evidence was sufficient to permit a jury to find that negligence in applying the cast too tightly caused the injury.

It said, "Even in cases requiring some expert testimony to show causation, jurors may be authorized to infer from the circumstances that the defendant was negligent in applying an approved medical treatment, notwithstanding absence of direct expert testimony to this effect and in the face of expert testimony to the contrary."

Michaels v. Spiers, 144 So. 2d 835 (Fla., Sept. 28, 1962; rehearing denied, Oct. 10, 1962). ◄

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LISTEN AND LEARN

TAPES OF THE MONTH

GENERAL

G-1204 **ORTHOPAEDICS IN THE OFFICE OR EMERGENCY ROOM**—Charles F. Wood, M.D., Louisville, Ky. Recorded: Kentucky State Meeting. Date: Sept. 20, 1962. Time: 35 minutes.

G-1205 **EXERTION, EXPOSURE, COMPENSATION, RE-EMPLOYMENT** — Kenneth G. Kohlstaedt, M.D., Indianapolis, Ind., moderator; Benjamin F. Small, Associate Dean, I. U. School of Law, Indianapolis; James V. Donadio, Indianapolis; Howard B. Sprague, Brookline, Mass.; Robert B. Chevalier, M.D., Indianapolis. Recorded: Indiana State Meeting. Date: Oct. 8, 1962. Time: 1 hour, 30 minutes.

PSYCHIATRY

P-2082 **THE GENERAL ASPECTS OF EMOTIONAL PROBLEMS**—S. Spafford Ackerly, M.D., Louisville, Ky., moderator; "The Internist's View," R. K. Noback, M.D., Lexington, Ky.; "The Psychiatric View," John C. Nemiah, M.D., Boston, Mass.; "Musculoskeletal Aspects," J. Leonard Golder, M.D., Durham, N. Carolina; "Headache and Vertigo," Francis L. Lederer, M.D., Chicago, Ill. Recorded: Kentucky State Meeting. Date: Sept. 19, 1962. Time: 1 hour, 30 minutes.

TREATMENT

T-3054 **ENLARGED LYMPH NODES: A CLINICAL PATHOLOGICAL PROBLEM** — Edward A. Gall, M.D., Cincinnati, Ohio. Recorded: Kentucky State Meeting. Date: Sept. 20, 1962. Time: 25 minutes.

T-3055 **RECENT DEVELOPMENTS IN DIAGNOSIS AND THERAPY OF ENTEROPATHOGENIC E. COLIC DIARRHEA**—Walter A. Murray, M.D., Columbus, Ohio. Recorded: Kentucky State Meeting. Date: Sept. 20, 1962. Time: 25 minutes.

T-3056 **TRAUMA PANEL**—Paul Merrell, M.D., Indianapolis, moderator; "Resuscitation," Cyril Taylor, M.D., Indianapolis; "Athletic Injuries," Frank W. Teague, M.D., Indianapolis; "Law for the Good Samaritan," Judge James A. Emmert, Shelbyville; "Emergency Rooms," John V. Thompson, M.D., Indianapolis; "Transporting the Injured," Carl D. Martz, M.D., Indianapolis. Recorded: Indiana State Meeting. Date: Oct. 9, 1962. Time: 1 hour, 20 minutes.

PEDIATRICS

PD-6057 **PEDIATRIC ALLERGIES**—Harry S. Andrews, M.D., Louisville, Ky. Recorded: Kentucky State Meeting. Date: Sept. 20, 1962. Time: 30 minutes. ◄

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ABSTRACTS

BOOK REVIEWS

TUMOR VIRUSES OF MURINE ORIGIN

Ciba Foundation Symposium, 1962, edited by G. Wolstenholme and Maeve O'Connor, Little, Brown & Co., Boston, Mass., 441 pages; numerous illustrations, tables and figures—$10.75.

As the frontiers of medicine expand, many previously completely separate fields of research begin to converge and overlap. When first uncovered, viruses, almost automatically, were considered as a very esoteric branch of microbiology: the least complex of living things. Today, the sciences of genetics, physical chemistry and the unraveling of the very code of life are finding a common ground in the intensely important problem: *what is cancer?*

Some 27 eminent oncological experts met in Italy for an exchange of thoughts on this extremely up-to-date subject. The edited proceedings are excellent fare indeed for both the expert and the physician seeking information. For my part, I would also recommend additional reading of the *Federation Proceedings* for Nov.-Dec., 1962, where there is a symposium on Viral Neoplasia. The binding of the Ciba Symposium is excellent, the paper is of the finest quality and I saw almost no typographical errors.

Questions are beginning to be formulated in ways undreamt of even a decade ago. When a virus insinuates itself into the DNA apparatus of a cell, is it producing an infection or causing a mutation? Why do specific hormones hold these viruses in abeyance while others specifically stimulate uninhibited growth? And what is the physical chemistry of the curious fact that EDTA, ethylenediaminetetracetic acid, is able to chelate with the cancer restraining agent and thus unmask the oncogenic virus?

After reading such works as these, one becomes sanguine of the rapid approach of the day when the problem of the etiology of cancer will be solved. In the meantime, I can unreservedly recommend this to other less than expert students such as myself. The Ciba Foundation can congratulate itself on having outdone itself in this particular endeavor: it is a distinguished performance.

ARNOLD LIEBERMAN, M.D.,
New York, N. Y.

CARDIOLOGY

First Supplement, an Encyclopedia of the Cardiovascular System. Aldo Luisada, editor; McGraw-Hill Book Co., New York. $35.00 for the loose leaves to be inserted into their appropriate places in the five volumes of the set.

The enormous infusion of mostly new and original material almost intimidates this reviewer as he surveys the superb set in its present bulky entirety! In my original review of just three years ago, I lavished many superlatives and congratulated Dr. Luisada on his courage and unflagging

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zeal. He has continued in the same spirit and has managed to soar to even greater heights.

Of course, many pages are routine replacements for old: copyrights, new names on the board, an 139-page new cumulative index—other similar items. However, the bulk of the new material is just that: whole new chapters presenting, in marvelous detail, entirely new topics. Thus, in the very first addition to Volume I, there is a perfectly presented, meticulously illustrated analysis of the vasculature of the neck and head.

Dr. F. A. Mettler does such a beautiful job that one is left a little wistful to have the pictures in black and white and not in color. Dr. Luisada has seen to it that Dr. G. H. Glaser presents a chapter in another volume on cerebrovascular attacks. The clinical analysis is totally up to the minute: intermittent cerebral insufficiency is analyzed—when does it abate and when does it go on to cerebral infarction and encephalomalacia? When should one do angiograms and consider surgery? When should one anticoagulate and when is one to be masterfully inactive?

And then Dr. Luisada had Dr. Rustom Jal Vakil of India write a chapter on "Clinical Aspects of Hypertension"—brief, precise, lucid and compact.

The basic sciences contribute almost esoteric (as yet) aspects of cardiology; Inge Edler writes on ultra-sound cardiac studies; Dr. Tsuneo Yoshida outlines the application of the Doppler effect to the detection of valve movements; Dr. Demetrio Sodi-Pallares presents in his own inimitable fashion his scholarly studies on endo- and epicardial EKG's. This same author also has a brand new chapter on EKG patterns in congenital heart disease.

Dr. Luisada and his magnificent editorial board have set and are maintaining standards of excellence that will be hard to emulate. The publishers are doing more than their share.

What more can one say?

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

Abstracts From Various Literature, Prepared by AMA

BREAST MASSES

In a group of 565 patients subjected to biopsy of discrete breast masses, the preoperative clinical impression of benignancy or malignancy by surgeons was confirmed on pathological examination in 90% of the cases. However, 21% of all malignancies were discovered in the group considered benign before operation. It is concluded that all discrete breast masses, no matter how benign in character on clinical examination by the attending surgeon, must be considered malignant until proven otherwise by pathological examination following excisional biopsy.

Wright, H. K.: Breast Masses, *Arch. Surg.* 85:1021 (Dec.) 1962.

EARLY TREATMENT OF UNDESCENDED TESTES

This report is concerned with observations on 352 children who were hospitalized on account of undescended testis. With the exception of 12 patients who had a migrating testis all were operated on. The migrating testis does not require surgical treatment, because it is normal and its attachments are of sufficient length to permit placement in the scrotum without tension. In these patients the processus vaginalis peritonaei has remained open, and the testis, because of a temporary hypertonus of the cremaster muscle, moves upward beyond the scrotum up to the external inguinal ring. This reflex mechanism is elicited chiefly by exposure to cold. Of the 340 children operated on 283 had unilateral and 57 had bilateral fixed nondescent. A total of 214 patients could be reexamined, two thirds of them after they had become adults. In 25 of the 57 bilateral cases, the ejaculate could be analyzed. So-called superficial inguinal ectopia, erroneously considered to be fixed retention, has a much better prognosis with regard to later fertility than true nondescent. In patients with bilateral true nondescent (with normally developed testes), best results with regard to later

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fertility were achieved, when the operation had been performed before the age of 10 years. After conservative measures have been tried and have failed, the optimal time of operation for fixed nondescent is before the sixth birthday.

Maier, W., Spann, W.: Importance of Early Treatment of Undescended Testes in the Prevention of Sterility. *Deutsch Med. Wschr.* 87:1697 (Aug. 31) 1962.

SUDDEN AND UNEXPECTED DEATH IN INFANCY WITH PARTICULAR REFERENCE TO THE SO-CALLED CRIB DEATHS

So-called crib deaths in infancy constitute one of the largest and most distressing problems in forensic pathology. The attribution of these deaths to status thymicolymphaticus and to mechanical suffocation has been rejected on substantial grounds, and there seems no reason to reconsider this rejection. The authors favor the notion of infection, though conceding the possibility of a noninfectious metabolic catastrophe. New research insights are urgently needed. In the meanwhile, families should not be permitted to shoulder burdens of guilt, and pediatricians, general practitioners, and public health officials should be helped to greater awareness of the problem.

Huntington, R. W., Jr., Jarzynka, J. J.: Sudden and Unexpected Death in Infancy with Particular Reference to the So-Called Crib Deaths, *Amer. J. Clin. Path.* 38:637 (Dec.) 1962.

STAPHYLOCOCCAL PNEUMONIA IN INFANTS AND CHILDREN

The author studied 176 cases of pneumonia and 35 of empyema. There were seven deaths, five with empyema and two without. Early diagnosis on clinical grounds and institution of therapy without awaiting radiological or bacterilogical confirmation are necessary to prevent empyema and to reduce the mortality. Cloramphenicol and erythromycin given systemically were generally effective. Antitoxin appeared to be of value. Blood transfusion was used to correct the anemia. Empyema sometimes developed rapidly, and a chest x-ray was required to make the diagnosis. Treatment by immediate closed catheter drainage was effective. Although there has been no significant decrease in number of cases of pneumonia encountered, there have been no deaths since 1958 on the treatment outlined. Pneumatoceles were not uncommon, and all resolved spontaneously.

Gourlay, R. H.: Staphylococcal Pneumonia in Infants and Children, *Canad. Med. Assn.* 87:1101 (Nov. 24) 1962.

AMBIGUOUS SEX IN THE NEWBORN

Normal and abnormal external sex differentiation is described and the importance of a masculinizing factor in early fetal life in male children is stressed. In a child with ambiguous genitalia the abnormality may have arisen for one of two reasons: (a) imperfect masculinization of male external genitalia or (b) some masculinization of what were intended to be female external genitalia. Thus, the appearances of the external genitalia of an imperfect male may be identical with those of a partly masculinized female. The classification of all such cases based on their nuclear sex chromatin is given and their management described. It is recommended strongly that thorough investigation should always be carried out during the first year of life.

Gordon, R. R., Dewhurst, C. J.: Ambiguous Sex in the Newborn, *Lancet* (London) 2:872 (Oct. 27), 1962.

SINGLE UMBILICAL ARTERY: INCIDENCE, CLINICAL SIGNIFICANCE, AND RELATION TO AUTOSOMAL TRISOMY

In a study of 2,500 consecutive births at the Women's Pavilion, Winnipeg General Hospital, the incidence of single umbilical artery was 0.2% of all births. This is considerably less than the incidence of 1% of all births quoted in the literature. The authors believe that the lower figure is more representative of the true incidence. The association of single umbilical artery with multiple congenital malformations is confirmed, and in addition there appears to be a significant association of late maternal age and low birth weight in the group in which single umbilical artery was found. The finding of single umbilical artery in three out of six cases of autosomal trisomy is noted. Routine examination of the cord in all births is indicated, and the presence of single umbilical artery should alert the physician to the possibility of congenital malformation which may not be clinically evident on ordinary examination of the newborn.

Lenoski, E. F., Medovy, H.: Single Umbilical Artery: Incidence, Clinical Significance, and Relation to Autosomal Trisomy, *Canad. Med. Ass. J.* 87:1229 (Dec. 8), 1962.

ABNORMAL CHROMOSOME IN A HEMOPHILIAC WITH CONGENITAL ABNORMALITIES

A male hemophiliac aged 15 years with arachnodactyly, sexual infantilism, and normal intelligence was found to have a modal number of 46 chromosomes, but an abnormal, large metacentric chromosome replaced the X. The buccal smear was negative with regard to sex chromatin. The abnormal chromosome in this case is interpreted as being a sex chromosome produced by a translocation between the two maternal X's during oogenesis. The relationship between this and other X chromosomes with abnormal morphology which have been described is discussed.

Elves, M. W., Israels, M. C. G.: An Abnormal Large Chromosome in a Hemophiliac with Congenital Abnormalities, *Lancet* (London) 2:909 (Nov. 3), 1962.

MAXIMUM DOSES OF CHLORAMPHENICOL

Ninety-five patients with severe bacterial infections were treated with the highest tolerated dosage of chloramphenicol and other drugs. Analysis of these cases revealed no toxicity from total doses of chloramphenicol that averaged 64 grams. The high dose regimen often gave satisfactory results after failure with moderate doses of antibiotics. These findings suggest that in severe infections the maximum dosage of drugs consistent with the nature of the disease, the toxicity of the drug, and the condition of the patient will often be of benefit, when lesser measures fail, and that chloramphenicol is a relatively safe antibiotic for use in this manner.

Waisbren, B. A., Simski, C., Chang, P.: Administration of Maximum Doses of Chloramphenicol, *Amer. J. Med. Sci.* 245:1 (Jan.), 1963.

PREVENTION OF MEGALOBLASTIC ANEMIA IN PREGNANCY BY FOLIC ACID

The effect of periodic dosage of folic acid in preventing megaloblastic anemia in pregnancy has been assessed. The drug was given in doses of 15 mg to 762 patients at every clinic attendance in the third trimester. The total amount received varied between 30 and 180 mg. Of those who attended regularly (fortnightly until the 36th week, weekly to term), signs of folic acid deficiency developed in only two. Both had had a postpartum hemorrhage. The postpartum hemoglobin was significantly higher in those patients who received iron and periodic folic acid than in those who received iron alone. Megaloblastic erythropoiesis was observed in 4% of a control group of 841 patients.

Dawson, D. W., More, J. R. S., Aird, D. C.: Prevention of Megaloblastic Anemia in Pregnancy by Folic Acid, *Lancet* (London) 2:1015 (Nov. 17), 1962.

DOWN'S SYNDROME (MONGOLISM) WITH NORMAL CHROMOSOMES

Down's syndrome (mongolism) in 1959 was found to be associated with an extra autosome. Since then, all published cases of mongolism have been reported to have this extra chromosome either as a separate unit or translocated on to another autosome of the group 13-15 or 21-22. A child with all the clinical characteristics of mongolism is described having a completely normal chromosome constitution. His chromosomes were examined from preparations of skin and blood on repeated occasions, and from bone-marrow on one occasion. Even though trisomy 21 is a reliable sign of mongolism, that the correlation may not be an absolute one is demonstrated by the present case.

Hall, B.: Down's Syndrome (Mongolism) with Normal Chromosomes, *Lancet* (London) 2:1026 (Nov. 17), 1962. ◄

ROSTER AND YEARBOOK ISSUES

The Roster and Yearbook issues of the Indiana State Medical Association will appear in June. Included in the Roster will be the names of all members of the ISMA listed alphabetically and by counties, plus the names of all the Woman's Auxiliary.

The Yearbook, besides carrying the Roster, includes listings of the following: State Health Organizations; Professional Medical and Allied Organizations; Voluntary Organizations; Heads of Departments at the I. U. School of Medicine; Indiana Accredited Practical Nursing Schools; Approved Hospitals in Indiana; Approved Mental Hospitals; Licensed Nursing Homes; Poison Control Centers in Indiana; Disease Prevention by Immunization and Chemoprophylaxis and Class A Narcotic Drugs.

If you would like to order either or both of these special issues, please check the appropriate box and send it along with your check or money order to *The Journal*, 3935 N. Meridian St., Indianapolis 8.

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Denis J. Cuka, 6 Cambridge Terrace, Allston, Mass. —*Anesthesiology*

Theodore J. Eckberg, U. S. Naval Hospital, Memphis, Tenn.—*Ear, Nose and Throat*

Carl O. Sonnemann, 1419 Forres Ave., St. Joseph, Mich.—*Industrial or Institutional*

Thomas N. Gynn, 6 Hayes St., Waterford, Conn.—*Internal medicine*

Antonio Hernandez, Newark City Hospital, 65 Bergen St., Newark, N. J.—*Ob-Gyn.*

Thomas B. Hill, 710 N. Monroe, Lowell, Mich.—*Student Health Service*

Albin J. Janusz, 822 W. Lincoln Blvd., Freeport, Ill.—*General surgery*

F. A. Makhtar, 666 Elm St., Buffalo, N. Y.—*General surgery*

Pablito V. Tanedo, 4217 Southern Pkwy., Louisville, Ky.—*General, thoracic and neurosurgery*

A. Sircar, 2802 Mineral Springs Ave., Knoxville 17, Tenn.—*General and thoracic surgery*

Harold R. Schumacher, 1512 Longfellow Dr., Cherry Hill, N. J.—*Internal Medicine—Hematology*

William S. Mullican, 3620 Donald Ave., Indianapolis 24—*Internal Medicine*

Edward H. Cornell, 6726 N. Oconto Ave., Chicago 31, Ill.—*General Surgery*

Moufid Mitri, 7064 N. Ridge Blvd., Chicago 45, Ill. —*General Surgery.*

William J. Moran, Good Samaritan Hospital, Cincinnati, O.—*Ob-Gyn.*

James F. Seviour, 88 Murellen Cres, Toronto, Canada—*Ob-Gyn.*

Glenn R. Shaw, McDonald Army Hospital, Ft. Eustis, Va.—*Ob-Gyn.*

William J. Crawford, 5756 B. Allison Ave., Fort Knox, Ky.—*Ophthalmology*

Jack D. Gift, 2322 Henry Circle, Augusta, Ga.—*Radiology*

Joseph B. Raddin, 1502 W. Osborn Rd., #1, Phoenix, Ariz.—*Clinician with pharmaceutical firm, associate or group.*

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Four Alumni Nominated for Vacancy on Indiana University Board of Trustees

Four Indiana University graduates have been nominated to fill a vacancy on the university's board of trustees.

Ballots were mailed late in April to nearly 68,000 Indiana University degree holders who are eligible to vote in this year's election. The newly elected trustee will represent the alumni for a three-year term beginning July 1.

Following is a biographical paragraph on each of the candidates:

MILES O. BARTON—Dr. Barton, D.D.S., 1933, has been a practicing dentist in Indianapolis since his graduation from the university. He is a member of the oral surgery staff at Methodist Hospital; a consultant in the cleft palate and cleft lip clinic at Riley Hospital, and a member of the Indiana Advisory Council for Mental Health.

A member of the Indiana University Alumni Association, Dr. Barton is the present chairman for the School of Dentistry Alumni Scholarship Fund for the Varsity Club. He also is a member of the Indiana University Men's Club of Indianapolis, the Varsity Club and the Hoosier Hundred and the Bo McMillin Achievement Award program.

Dr. Barton is a member of the American, Indiana and Indianapolis Dental Associations; a member of the Pierre Fauchard Dental Academy; the American Association Endodontists; Academy of International Dentists; Indianapolis Chamber of Commerce; Indiana Society of Chicago, the Board of Directors of the Indianapolis Athletic Club; the Indianapolis Boys Club and the Downtown Quarterback Club.

MARGARET WOODBURN CROWDER — (Mrs. Frank S.) 1935, formerly of Bloomington, is a resident of Indianapolis where she is an active promoter of worthy projects. At present she is national chairman of the Alliance of Lady Lobbyists and is editor of the *Hoosier Republican.* Mrs. Crowder is one of the founders of the Press Club's Front Page Ball and is a member of the Citizens School Committee, Fortnightly Literary Club and president of the Northside SCORE.

Mrs. Crowder served for 13 years for the Indianapolis Community Chest and retired as residential chairman. She served four years as maintenance chairman on the board of the Indiana State Symphony Society Women's Committee and as public relations chairman for the Indiana Federated Republican Women's Clubs.

Mrs. Crowder has served as president of the Women's Club and is a 10-year-member of the Alumni Association's Student Advisory Committee. She was a member of the National Alumnae Foundation Committee in '55-'56.

DAVID WERNER ORTLIEB—Mr. Ortlieb, MBA'57, DBA'59, is a Vice-President of Mead Johnson International Division of Mead Johnson & Company of Evansville. He is a former faculty member of the Indiana University School of Business and former executive secretary of Indiana University's Master of Business Administration program. In 1959, Mr. Ortlieb became an associate in the organization planning department of Mead Johnson & Company before advancing to his present position in 1961.

Mr. Ortlieb is on the board of directors of three international firms and the Evansville Blind Association. He also is a member of the American Economic Association, and the Evansville Chamber of Commerce. He is a member of Beta Gamma Sigma and Sigma Iota Epsilon honorary fraternities and Beta Theta Pi social fraternity. His undergraduate degree was awarded in 1955 from Lawrence College in Appleton, Wisconsin.

Mr. Ortlieb is listed in *Who's Who in Commerce and Industry* and is a member of the Indiana University Alumni Association of Vanderburgh County, and the School of Business Alumni Association.

HOWARD (HOWDY) S. WILCOX—Mr. Wilcox, AB'42, is the director of personnel and public relations for the Indianapolis Newspapers, Inc., and also is a brigadier general and commanding general of Indiana's 38th Infantry Division.

Following World War II, Mr. Wilcox was in the advertising business; past president, Indiana Industrial Advertising Association and National Newspaper Promotion and Public Relations Association; a member of the board of directors of the Indianapolis Athletic Club, TV Bank Corporation, the Indianapolis Boys Club and Starlight Musicals. Also he is a past Civil Defense director in Indianapolis and Bloomington. He also helped originate and later served as president of the Indianapolis "500" Festival. He is chairman of the Board of Alpha Tau Omega Foundation; treasurer of the United States Auto Club, and in 1955 was the recipient of the Junior Chamber of Commerce Distinguished Service Award.

A member of the Indiana University Alumni Association and the University Men's Club of Indianapolis, Mr. Wilcox was executive director of the Indiana University Foundation, and while in this position founded the Student Foundation Committee and the "Little 500." ◄

Blue Shield Membership Gains In 1962

(One of a series prepared by Blue Cross-Blue Shield)

Indiana Blue Shield enrollment reached 1,469,670 as of December 31, 1962, the largest membership ever, representing a net gain of 38,419 for the year.

Our sales effort recorded significant progress during 1962 toward a goal established more than six years ago. At that time a master plan of reorganization and management development was designed to meet the challenges of the market and the competition.

However, the introduction of new and complicated rating systems, the changeover to the annual master contract, the statewide enrollment of Federal employees and the recession period demanded unusual effort and delayed implementation of the plan.

Since none of these disruptions occurred during 1962, the enrollment division was able to finally carry out a refined version of the master plan, accelerating the personnel development programs, reorganizing the division sales districts for maximum efficiency, analyzing sales techniques and practices, and expanding the market research activity.

Before the end of the year, the greater effectiveness of the sales effort under the new plan began to be apparent and the enrollment division ended 1962 with the highest percentage of productive sales calls on record. Once again, as in both 1960 and 1961, approximately 23,000 calls by sales representatives were required in sales maintenance for the renewal of master contracts with each account and in conducting re-enrollments. However, service calls on accounts were reduced from 7,651 in 1961 to only 6,804 in 1962. This three percent reduction in service calls was reflected in a corresponding increase of three percent in sales development calls during the year.

The continuing advancements in medical science and the resultant improvements and changes in medical care make it necessary for us to be ever-changing if we are to meet our objectives as a community service prepayment health care plan.

The effectiveness of the sales effort is best illustrated by the quality of benefit patterns now in existence in our accounts. The enrollment division has succeeded in converting 51% of all accounts to Blue Shield preferred and special county schedules and by the end of the year, 97% of all accounts had Blue Shield in-hospital medical benefits. Some 60% of all Blue Shield accounts had added the out-patient diagnostic endorsement.

This upgrading of benefit patterns is very important for many reasons, chief of which is bringing to the membership the broadest possible coverage in keeping with the changes in medical practice, thus providing them the greatest protection at all times against the cost of illness. Improved benefit patterns also reflect in more income for Blue Shield which in turn results in lower operating percentages.

Blue Shield ended the year with its highest membership in history, 1,469,670—representing a net gain of 38,419 members. In many ways 1962 was the best year ever for Indiana Blue Shield, and we have established both plans and goals that will enable us to do an even better job in 1963. ◄

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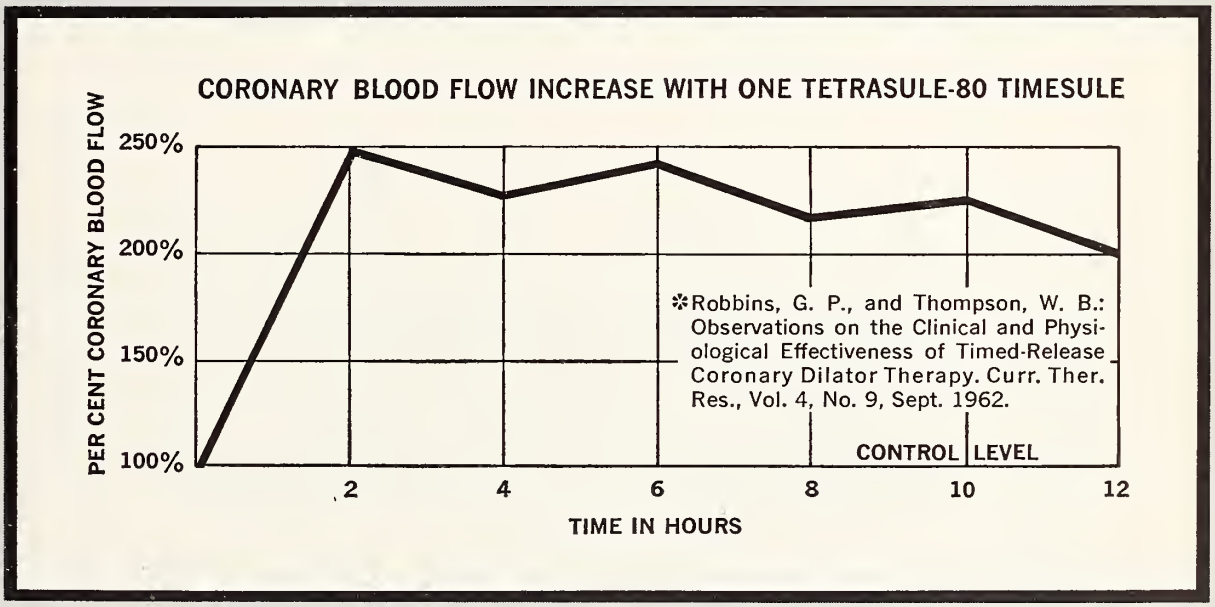


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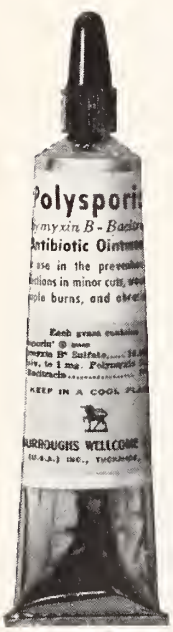
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MONTHLY REPORT—March, 1963

Disease	Mar. 1963	Feb. 1963	Jan. 1963	Mar. 1962	Mar. 1961
Animal Bites	421	293	235	430	536
Chickenpox	2,972	1,054	1,132	605	1,138
Conjunctivitis	247	86	67	139	136
Diphtheria	2	1	0	0	0
Dysentery, Unspecified	847	219	533	69	23
Impetigo	237	96	67	80	92
Infectious Hepatitis	62	163	41	111	366
Infectious Mononucleosis	111	44	26	23	39
Influenza	30,839	12,591	1,314	2,206	823
Measles (Rubeola-Rubella)	2,187	686	654	1,257	1,065
Meningitis, Meningococcal	3	3	9	5	2
Meningitis, Other	10	5	4	12	10
Mumps	1,292	408	503	397	1,101
Pertussis	149	63	49	12	16
Pneumonia	1,062	316	245	152	229
Poliomyelitis	0	0	0	1	1
Streptococcal Infections	2,360	993	642	693	1,156
Tinea Capitis	44	10	28	5	12
Tuberculosis (Active)	106	85	118	90	Not Available

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References: 1. A.M.A. Council on Drugs: J.A.M.A. 183:469 (Feb. 9) 1963. 2. Gruenberg, F.: Curr. Ther. Res. 2:1 (Jan.) 1960.

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REPORTS FROM THE U.S. FOOD AND DRUG ADMINISTRATION

● It is amazing what some people will do to scrounge a buck. A rotten-egg racket has been uncovered and its perpetrators sentenced recently. Eggs which have been incubated and fail to hatch are understandably barred from sale as food. Such eggs have been known to be broken into cans, mixed with good eggs, deodorized with chemicals, frozen, and sold for use in food manufacturing. One lot of such "food" was shipped from hatcheries in Michigan into Indiana and 200 cases of incubator rejected eggs were seized in Delaware. May the appropriations of the FDA always be large enough to catch such racketeers.

● Judge Jesse E. Eschbach of the Federal District Court in Fort Wayne fined a pest control company of Richmond, Indiana and one of its partners after a guilty plea was entered to charges of carelessly distributing a highly potent rat poison, which endangered domestic animals. Some 28 dogs and cats were reported to have died as a result.

● One fish may look like another after being prepared for sale, but the FDA has a new electrophoretic method of identifying fillets and fish cakes. A Lowell, Mass. firm was found shipping an unidentified fish to Richmond, Indiana, labeled as cod and haddock. A Chicago firm shipped pollock to Madison, Indiana as haddock and perch; pollock to Logansport as cod fish; and pollock to Michigan City as haddock. Pollock is an inferior fish, cheaper than the fish it had been substituted for.

● Canned bacon, sterilized by gamma radiation, has been declared safe, nutritious and tasty. Ten years of research by the U. S. Army Quartermaster Corps has shown that bacon may be preserved by radiation methods without altering its flavor, color, odor, texture or nutritional quality. The Food and Drug Administration has followed the long experiment closely and has given clearance for the process. Regulations have been published. This is the first food product certified for radiation sterilization. The Army is working on 20 other food items at the present time.

● The Federal Hazardous Substances Labeling Act has now passed its first anniversary. In the past year, more than a dozen types of hazardous substances have been seized in 25 separate actions because labeling was inadequate to warn users of potential danger. February 1, 1963 was the deadline when regulations went into effect governing type size and placement of warning information on labels.

● Some antibiotic sensitivity discs have been barred from shipment by the FDA because the strength of the discs were found to be grossly unreliable. Discs varying from 40% to 280% of their declared potency were found. In addition to being accurate, the discs must be made from certified batches of the various antibiotics.

Ten Sears, Roebuck Foundation Scholarships Granted to Students

Medical students are granted scholarships by the Sears, Roebuck Foundation to enable them to spend two months during the summer, living and working with a physician in a rural area. The scholarships provide $500. In addition to this the community in which the student serves provides room and board

for the two-month period. The Student American Medical Association administers the program.

This year ten scholarships have been granted. One of these goes to Gerald E. Vanderpool, a sophomore at the University of Louisville School of Medicine. He will work with Dr. Jack D. Bland of Holland, Indiana.

Dr. Kenneth L. Craft, Indianapolis, attended the recent cruise-meeting of the Pan American Medical Society. Daily meetings were held aboard ship and at the various ports of call among the islands visited.

Dr. Craft presented a paper on "Allergy in its Relation to Otolaryngology."

Ayerst Laboratories Publish List of Medical Films Available to ISMA

Ayerst Laboratories have issued a catalog listing 39 medical films which are available to medical societies without charge. A variety of subjects are covered.

All films are 16 millimeter sound and most of them are in color. The catalog and order forms may be obtained by writing Ayerst Laboratories, 685 Third Ave., New York 17.

Units To Test Diagnostic Ability Available For Physicians' Meetings

Units that enable from four to 15 or more physicians simultaneously to test their ability to diagnose heart disease from case histories are available on loan from the American Heart Association.

The units, prepared by the AHA Committee on Professional Education, have been designed in four-panel sections to accommodate large medical meetings and two-panel sections suitable for classroom use. Each panel illustrates a separate medical case with three X-rays and a set of electrocardiograms. Written case histories accompany the visual material.

Groups wishing to arrange to use the units may write to the AHA Distribution Department, 44 East 23rd St., New York 10.

New Diabetes Executive Secretary

Mrs. Julia Shackle of Indianapolis is now serving as executive secretary of the Indianapolis Diabetes Association. She replaces Mrs. Leanah McNeely, who resigned recently, and who has been executive secretary since the association was organized in 1950.

American Board of Pathology Names Indiana Physicians as Diplomates

The American Board of Pathology has announced that four physicians in Indiana have recently passed examinations in pathology and have been designated as diplomates of the Board of Pathology.

The physicians are Dr. Merritt O. Alcorn, Jr. of Madison, Dr. Charles H. Aust of Fort Wayne, Dr. Albert Kaltenthaler of Gary and Dr. Rodney F. Porro of Evansville.

American Ob-Gyn Board Accepting Applications for Certification

Applications for certification in the American Board of Obstetrics and Gynecology, letters requesting reopening of applications, and requests for re-examination are now being accepted in the office of the Executive Secretary.

All applications and letters of request must be submitted by *July 1, 1963*, and accompanied by *current* duplicate lists of patient dismissals for the preceding twelve months.

Write Robert L. Faulkner, M.D., Executive Secretary, 2105 Adelbert Rd., Cleveland 6.

Blue Shield Re-elects R. S. Saylor

R. S. Saylor, executive vice president of Indiana Blue Shield, was re-elected a member of the Board of Directors of the National Association of Blue Shield Plans at the 1963 annual business meeting of Blue Shield Plans held April 1 in Chicago.

At the same meeting, Mr. Saylor was re-elected treasurer of Medical Indemnity of America, Inc., the national underwriting agency for all Blue Shield Plans, and also appointed to continue as a member of the joint operating committee of Medical Indemnity of America, Inc., and Health Service, Inc. ◄

Annual Meeting Dates of Professional Medical and Allied Organizations

INDIANA STATE SOCIETY OF ANESTHESIOLOGISTS
Date May 18
Place Marott Hotel, Indianapolis

INDIANA ACADEMY OF GENERAL PRACTICE
Date March 11-12, 1964
Place Murat Temple, Indianapolis

INDIANA NEUROPSYCHIATRIC ASSOCIATION
Date Second Wednesday of every month, October through May
Place The Athenaeum, Indianapolis

INDIANA OBSTETRICAL AND GYNECOLOGICAL SOCIETY
Fall Meeting
Date November 13
Place To be announced
Annual Meeting
Date January 15, 1964
Place To be announced

INDIANA ORTHOPAEDIC SOCIETY
Date June 14-15
Place Indianapolis

INDIANA ASSOCIATION OF PATHOLOGISTS
Date November 17
Place Methodist Hospital Conference Room

Annual Pathological Seminar
Date May 19
Place Veterans Administration Hospital

INDIANA CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS
Date October
Place Indianapolis

AMERICAN COLLEGE OF SURGEONS, INDIANA CHAPTER
Date May 24, 25*
Place Student Union Building
Indiana University, Bloomington

INDIANA HOSPITAL ASSOCIATION
Date October 23-25
Place French Lick, Indiana

NORTHERN DISTRICT, INDIANA CHAPTER, AMERICAN PHYSICAL THERAPY ASSOCIATION
Date May 18
Place Ortho Manor, Fort Wayne

* Note change in date.



a Private Psychiatric Center at Jacksonville, Illinois, *since 1901*

Complete psychiatric treatment in an environment for cure. A 60 bed hospital with the most modern diagnostic and therapeutic equipment for the treatment of nervous and mental disorders.

LICENSED: Illinois Department of Mental Health

MEMBER: Illinois Medical Service (Blue Cross-Blue Shield)

FUTURE MEETINGS

Trudeau School of Tuberculosis Offers Annual Postgrad Course

The Trudeau School of Tuberculosis will conduct its annual postgraduate course in chest diseases at Saranac Lake from June 3 to 21. The three-week session carries a minimal tuition of $100.

Inquiries may be sent to the secretary, Trudeau School of Tuberculosis and Other Pulmonary Diseases, Box 670, Saranac Lake, New York.

Diagnostic Roentgenology Course Offered by Cincinnati University

The fifth annual refresher course in Diagnostic Roentgenology will be held June 17-21 by the Radiology Department of the University of Cincinnati College of Medicine.

Further information may be obtained by writing Dr. Jerome F. Wiot, Department of Radiology, Cincinnati General Hospital, Cincinnati 29, Ohio. The course is open to radiologists and radiology residents. ◄



"Offhand I'd say you were allergic to something!"



Deaths

Paul S. Connell, M.D.

Dr. Paul S. Connell, 62, died at his residence in Plymouth Feb. 23. He had been ill since April, 1962.

A graduate of the I. U. School of Medicine, Dr. Connell was the present Marshall county health officer and a former county coroner. He was on the staff of the Parkview Plymouth Hospital, and a member of the Marshall County Medical Society.

Thomas L. Cooksey, M.D.

Dr. Thomas L. Cooksey, a Senior Member and member of the ISMA 50-Year-Club, passed away March 6 in Crawfordsville.

Dr. Cooksey, 92, was a doctor for 63 years and mayor of Crawfordsville for 14 of those years. He also served on the City Council, had been Montgomery county Republican chairman, president of the Indiana Municipal League, county health officer and secretary of the county medical society.

Dr. Cooksey began the practice of medicine at Fairfield in 1897 and went to Crawfordsville in 1913 after touring the country as a lecturer and evangelist. He retired in 1960.

Leonard A. Ensminger, M.D.

Dr. Leonard A. Ensminger, Indiana physician and surgeon for 50 years, died April 2 in Methodist Hospital. He was 84.

A native of Crawfordsville, Dr. Ensminger took his medical training at the Central College of Physicians and Surgeons in Indianapolis. He was professor of orthopedic surgery at the I. U. School of Medicine before his retirement.

A member of the Marion County Medical Society, Dr. Ensminger was also a member of the ISMA 50-Year-Club.

Paul Higbee, M.D.

Dr. Paul Higbee, 80, of Sullivan, died March 18 in the Crawfordsville Memorial Hospital in Robinson, Ill.

Dr. Higbee was a graduate of Chicago Homeopathic and a member of the Sullivan County Medical Society. He also was a member of the 50-Year-Club.

Otis A. Kopp, M.D.

Dr. Otis A. Kopp, Anderson physician for 35 years and a founder of the 40 and 8 nurse training program there, died March 6 in St. John's Hickey Memorial Hospital.

Dr. Kopp, 68, a graduate of the I. U. Medical School, served in Panama in World War I, was past president of the Madison County Medical Society and a former state legislator and Madison county coroner.

Lloyd C. Marshall, M.D.

Dr. Lloyd C. Marshall, 75, who practiced medicine at Mt. Summit until he was hospitalized three weeks ago, died March 17 at the Henry County Hospital following a short illness.

A member of the 50-Year-Club, Dr. Marshall also served on the ISMA Grievance Committee. A native of Blountsville, Dr. Marshall graduated from the I. U. School of Medicine in 1912. He began practicing medicine in Mt. Summit in 1913. ◄

ARTIFICIAL LIMB WEARERS



Hanger Limbs are being successfully worn by amputees of all ages. David Canfield, just 13 months *(illustrated)*, is one of the many young children growing up on Hanger Legs. In contrast, Captain W. T. Traylor, over 75 *(illustrated)*, now wears his fifth Hanger. He is a fire inspector who must cover continually hospitals, schools, sports events, etc., and be on his feet for hours at a time.

Age: 13 Months



The success of Hanger Limbs with amputees of such widely varying types can be largely attributed to custom manufacture and individual fitting. Unusual conditions are carefully investigated by experienced fitters, and limbs are manufactured to meet individual requirements. The experience of Hanger's over 100 years is given to every amputee so that his rehabilitation may be successful.

Age: 78 Years

Hanger PROSTHESES

1529 N. Illinois St., Indianapolis 2, Ind.
3108 Burnet Avenue, Cincinnati 29, Ohio
Fairfield at Pontiac, Fort Wayne, Ind.
416 N. Main St., Evansville, Ind.

County, District News

Boone

Dr. James R. Brillhart spoke on "The Use of Obstetrical Forceps" before the March 5 meeting of the Boone County Medical Society.

Cass

"Hepatitis" was the subject of Dr. Hunter Soper when he spoke before the April 1 meeting of the Cass County Medical Society. There were 25 members present.

Clinton

A discussion of welfare programs highlighted the March 26 meeting of the Clinton County Medical Society. There were 13 members attending.

Chester L. Waits has been elected president of the society for 1963. Harry T. Stout is the new secretary-treasurer.

Daviess-Martin

Dr. V. J. Chattin has been elected president of the Daviess-Martin County Medical Society. Assisting him will be Dr. C. Philip Fox, secretary-treasurer; Drs. Fox and E. B. Lett, delegates and Robert H. Rang and Robert Chattin, alternates.

Dearborn-Ohio

"Surgical Emergencies in the Newborn" was the topic of Dr. Lester Martin, a pediatric surgeon from Cincinnati, when he spoke before the March 14 meeting of the Dearborn-Ohio County Medical Society. The society has decided to give Type III Sabin vaccine in June, completing the county program.

Elkhart

The Elkhart County Medical Society met April 4 to hear Mr. John B. Buckley, Director of Contracts and Licensing, Miles Laboratories, Inc. speak on "The Meaning of the Federal Food, Drug and Cosmetic Act to the Medical Practitioner."

Grant

A Chicago physician, Dr. Jay J. Gold, spoke at the March 26 meeting of the Grant County Medical Society. His subject was "Normal and Abnormal Female Reproduction—Physiology Relating to the Oral Progesterone."

Huntington

"Medico-Legal Problems" was the subject of a talk by Mr. Stan Matheny, L.L.B., given before the March 12 meeting of the Huntington County Medical Society. Fourteen members attended.

Kosciusko

Dr. John E. Arford, Warsaw, has been elected president of the Kosciusko County Medical Society. Dr. Frederick C. Poehler, Claypool, was chosen secretary-treasurer.

Lake

The Lake County Medical Society held their annual Medical-Dental dinner March 13, with the Northwest Indiana Dental Association acting as hosts. Mr. John Keil, of the Internal Revenue Service and Lyle Whitledge, of the Bank of Indiana, were the speakers. Their topic was "Self-Employment Tax Bill Laws."

LaPorte

Dr. Robert Freeark, director of surgical education at Cook County Hospital, spoke before the March 19 meeting of the LaPorte County Medical Society. His subject was "Blunt Trauma of the Abdomen." Dr. George P. Backer has been elected president of the society for the coming year. Other new officers are Drs. John F. Kerrigan, vice-president and Edwin C. Mueller, secretary-treasurer. Delegates will be Drs. G. O. Larson and T. D. Armstrong and alternates will be Drs. J. C. Richter and Gene R. Hay.

Montgomery

Dr. Charles Cure discussed "Advancements in Neurosurgery in the Past Two or

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ADDRESS_____

CITY_____ STATE_____

Three Decades" with the 21 members of the Montgomery County Medical Society present at the March 31 meeting.

Orange

William Cromwell, D.D.S., and vice-president of the Orange County Cancer Society, presented a film on cancer detection technics at the April 2 meeting of the Orange County Medical Society. A program was outlined for the cancer detection clinic which was set for April 15-18 in Paoli. Mr. Dick Hammond, of Pfizer Laboratories, presented vaccine information and outlined the program for the polio "Sabin Oral Sundays" to begin April 21 in Orange County.

Sullivan

Dr. Glen McClure, Sullivan, is the newly elected president of the Sullivan County Medical Society. Dr. William L. Daugherty, Hutsonville, Ill., is the new vice-president and Dr. J. S. Brown, of Carlisle, is the new secretary. ◄

SCIENTIFIC EXHIBIT APPLICATION FORM

Committee on Scientific Exhibits
Indiana State Medical Association
3935 N. Meridian Street
Indianapolis 8, Indiana

Please send me an application form for a Scientific Exhibit at the ISMA Annual Convention, October 15-17, 1963, Murat Temple, Indianapolis, Indiana.

I propose to exhibit_____

Name_____

Address_____

City_____

State_____

Association News

EXECUTIVE COMMITTEE

March 27, 1963

Present: Wendell E. Covalt, M.D., chairman; Ralph V. Everly, M.D.; Maurice E. Glock, M.D.; Don E. Wood, M.D.; Kenneth O. Neumann, M.D.; Irvin W. Wilkens, M.D.; Ottis N. Olvey, M.D.

Frank B. Ramsey, M.D., editor of *The Journal;* Robert Hollowell, attorney, James A. Waggener, executive secretary.

Membership Report

Number of members as of Dec. 31, 1962		4,340
1963 members as of Feb. 28, 1963:		
Full dues paying	3,306	
Residents and interns	104	
Council remitted	26	
Senior	337	
Honorary	2	
Military	47	
Total 1963 members as of Feb. 28, 1963		3,822
Number of members as of Feb. 28, 1962		3,745
Gain over last year		77
Number of AMA members as of Feb. 28, 1963		3,725
Total 1962 AMA members as of Feb. 28, 1962		3,647
Gain over last year		78
1963 AMA members: Dues paying	3,208	
Exempt, but active	517	
	3,725	
Number who have paid state dues but not AMA dues as of Feb. 28, 1963		97

Headquarters Office

Medicare contract for the period 1 April 1963 to 31 March 1964 was approved for the president's signature on motion of Drs. Neumann and Olvey. Procurement of a bond from Hartford Accident and Indemnity Company covering the Medicare contract period was approved by consent.

Letter from *Prestige* magazine was read concerning the possibility of photographing the interior of the headquarters office for use in this magazine, and this was approved by consent.

The secretary discussed the possibility of having the American Medical Association prepare a deck of IBM cards which would greatly facilitate selection of men in various types of practice by communities, etc., and this was approved by consent.

Building Matters

Quotation from the W. L. Evans Company for installation of a humidification system in the building was reviewed. A quotation of $1,035.00 was given for an installation that would cover the entire building. If the meeting room area is not covered, $402.00 is to be deducted from the above amount. By consent it was agreed that this matter be tabled for further discussion.

A quotation from the National China & Equipment Corporation for the installation of hot food equipment in the building for the sum of $6,176.25 was presented by Dr. Everly, and it was agreed that this matter be studied further by the Building Committee. It was recommended that Dr. Everly make his report and display the plans at the Council meeting in April.

The question of supplies for maintenance of the grounds, painting of the basement, a lawn mower, and a place for storage of yard supplies was discussed, and upon motion of Drs. Neumann and Olvey, the sum of $500.00 was appropriated for the purchase of fertilizer, a lawn mower and a tool shed.

Plans were also discussed for finishing the basement and this will be discussed further at the next meeting.

Statements from the architects for the balance due for their services, plus the payment which had been advanced by the architects for Certificate of Compliance from the Administrative Building Council of Indiana amounting to $716.73 and $56.00 respectively were reviewed and were approved for payment on motion of Drs. Neumann and Glock, providing the statements are approved by the attorney.

Treasurer's Office

The treasurer's report on the cash balances, expenditures for the month of February, and the bond transactions was approved by consent.

Legislative Matters

Dr. Wood reviewed the AMA's seven-point program designed to forestall implementation of Social Security medicine by Congress and a letter was read from the Pharmaceutical Manufacturers Association asking the support of the association in opposing legislation currently before Congress dealing with the proposed regulation which would require government censorship of prescription drug ads before they could be published. Upon motion of Drs. Glock and Neumann, it was voted that the association should register an objection to this proposed regulation.

Wheat referendum. A letter from the AMA seeking the support of the association in the program of the American Farm Bureau Federation to defeat the wheat marketing quota referendum was read. No action was taken.

Dr. Wood reported on the successes of the association in the 1963 session of the state Legislature and discussed the governor's veto of S. B. 132, the Kerr-Mills implementation bill which was passed by both the Senate and House. He stated he did not know whether the Legislature would attempt to override the veto during the current special session.

Organization Matters

Senior membership. A letter from the secretary of the Johnson County Medical Society expressing disapproval of the requirement in the Constitution of the state medical association governing senior membership was read and by consent it was agreed

that a letter should be written to the Johnson County Society to the effect that if the society is dissatisfied with this section of the Constitution, they should present an appropriate resolution to the House of Delegates at the forthcoming meeting.

A letter from Dr. George D. Johnson, Spartanburg, South Carolina, concerning support of Dr. Bibler's candidacy for membership on the Board of Trustees of the AMA was read, as was a letter from the State Medical Society of Wisconsin announcing the candidacy of Dr. L. O. Simenstad, Osceola, for membership on the AMA Board of Trustees.

The secretary reported on actions taken by the Commission on Medical Economics and Insurance on two matters referred to this commission, the first concerning the establishment of a pension program by the American Medical Association, and the other dealing with charges for completion of insurance forms by physicians. The actions of the commission were approved on motion of Drs. Glock and Wilkens.

Letters of appreciation for the action of the association in memorializing the late Dr. Roscoe Sensenich and Dr. Alfred Ellison, past presidents of the association, were read for the information of the committee.

A letter was read from the Indiana State Association of Medical Assistants in which desired changes in the organization's Constitution and Bylaws were submitted. These changes were approved on motion of Drs. Glock and Everly.

On motion of Drs. Glock and Neumann, the Constitution and Bylaws of the Elkhart County Medical Association, submitted for approval of the association, were referred to the attorney to be checked. If the attorney finds no conflicts with the state association Constitution and Bylaws, they are to stand approved by the state medical association.

The secretary read for the information of the committee a report submitted by Dr. Norman Booher on his recent attendance at the National Health Forum and his attendance before the Shipman Committee in Washington, D. C., on the relationship between medical organizations and voluntary health agencies.

Membership in the Chamber of Commerce of the United States in the amount of $50.00 was approved on motion of Drs. Wilkens and Wood.

New Business

Dr. Wood suggested a letter over the name of the chairman of the Executive Committee be sent to the societies of which Dr. Kirtley and Dr. Bowen are members memorializing them for sending such high quality men to the state Legislature and pointing out the valuable contribution these physicians had made in behalf of medicine as members of the Senate and House.

The request of Dr. Irving Rosenbaum for assistance of the association in financing an exhibit for the Children's Museum was deferred for further study, upon motion of Drs. Glock and Everly.

The question of participation in the Science Fair was raised. Dr. Wood and Dr. Neumann pointed out they had received long distance calls concerning this, and on motion of Drs. Glock and Everly, this matter is to be referred to the Council at its April meeting.

A letter was read from the American Medical Association concerning the newly established AMA Committee on Medicine and Religion and expressing a desire to discuss this program with the officers of the association. Upon motion of Drs. Glock and Wood a representative of this committee is to be invited to attend the Council meeting on April 28 and be allotted ten minutes for the purpose of explaining this program.

A resolution prepared by the Student Loan Committee concerning the existing program of the association and requesting changes in the interest rate was read and upon motion of Drs. Glock and Neumann this is to be referred to the Council with a recommendation that the Council in turn refer it to the House of Delegates. The motion was carried with one dissenting vote.

Report of the survey conducted by the Commission on Convention Arrangements was distributed to each member of the Executive Committee and by consent it was agreed that this same report should be submitted to the Council at its April meeting.

The Journal

A report from the State Journal Advertising Bureau was read for the information of the committee showing that the advertising sales of the bureau have continued to drop since 1959.

Future Meetings

Indiana State Chamber of Commerce, French Lick, April 19-21, 1963. On motion of Drs. Glock and Neumann, Dr. Wood was authorized to attend this meeting.

AMA Legislative Conference, Chicago, April 20-21, 1963. On motion of Drs. Glock and Wilkens, Dr. Black, Dr. Neumann and the executive secretary were authorized to attend this meeting.

Ohio State Medical Association annual meeting, Cleveland, May 12 to 17, 1963. Dr. Glock will attend this meeting.

Annual Conference, Physicians and Schools, Chicago, October 10, 11 and 12, 1963. On motion of Dr. Neumann, taken by consent, the chairman of the Commission on Medical Education and Hospitals was authorized to attend this meeting.

There being no further business the committee adjourned to meet again at 4:00 p.m., Saturday, April 27, 1963, at the headquarters office.

The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 56 — June 1963 — Number 6

Review of New Laws Adopted by the 1963 General Assembly

Interpreted by
ROBERT HOLLOWELL, LL.B., legal counsel
Indianapolis

SENATE ENROLLED ACT No. 259

AN ACT concerning the rendering of first aid or emergency care at the scene of an accident, casualty, or disaster.

Be it enacted by the General Assembly of the State of Indiana:

SECTION 1. From and after the effective date of this act, no civil action may be brought against a person licensed to practice the healing arts in the State of Indiana, who has gratuitously rendered first aid or emergency care at the scene of an accident, casualty, or disaster to a person injured therein, for the recovery of civil damages as a result of any act or omission by the said person rendering such first aid or emergency care in the rendering of such first aid or emergency care. This immunity does not apply to acts or omissions constituting gross negligence or wilful or wanton misconduct.

THE GOOD SAMARITAN BILL

There has been considerable discussion and study in recent years of the situation involved with a physician voluntarily and gratuitously rendering first aid or emergency care at the scene of an accident. Various studies and reports have been made upon the subject of what percentage of physicians would stop and render first aid and what percentage would not, and as to those who would not so stop, the reasons therefor.

It is indicated that many physicians hesitate to voluntarily render first aid or emergency care at the scene of an accident. There may be a number of different reasons for such hesitancy. Some physicians, particularly those who have been in a specialty for many years may hesitate to volunteer in a medical emergency, because of the feeling that they are ill-equipped or "rusty" in the emergency procedures called for. But the reason frequently encountered is the possibility of being sued for malpractice.

In conducting classes on legal medicine at the university, I am always asked by a number of students questions relating to liability under such circumstances, so I know that it is in the minds of even medical students, not yet admitted to practice. Such fear is probably greater than is justified, as shown by the scarcity of suits based on emergency care. In an endeavor to remove or reduce such fear of possible suit and to encourage physicians to render such emergency care, at least nine states have adopted legislation giving the good samaritan physician some form of immunity or in some manner relaxing the standard of medical care in cases where the physician has voluntarily rendered gratuitous services in an emergency. This type of legislation has been referred to as "good samaritan" legislation.

The General Assembly of Indiana at the regular session in 1963 adopted a bill upon this subject.

As originally drawn, this bill contained a provision that any action brought to recover for such emergency care had to be brought within sixty

days from the date such care was rendered. By amendment, the period of limitation of action was removed and the last sentence added. As finally passed and signed by the Governor, this act by its language gives immunity from liability to a person licensed to practice the healing arts who has gratuitously rendered first aid or emergency care at the scene of an accident to a person injured therein. Then by the last sentence an exception to this immunity is made where the acts or omissions constitute "gross negligence or wilful or wanton misconduct."

Prior to this act it was considered that a physician who rendered such emergency care would be liable for negligence in the rendition of such care or emergency treatment. It may be generally stated that by negligence is meant a failure to use that degree of knowledge, skill, and care possessed and used by other physicians in similar lines of practice in the community or like communities. Or, in other words, did he, in the particular case, exercise such care and skill and comply with such diagnostic procedures and other procedures which were accepted proper and standard practices and procedures by physicians of reasonable skill and knowledge in that and like communities.

It would seem clear that it was the intent of this act to eliminate any cause of action against such physician predicated upon such negligence in the rendition of such emergency care at the scene of an accident, where the same is rendered voluntarily and gratuitously. This was approved for constitutionality by the Attorney General.

The next question is what is meant by "gross negligence," and "wilful or wanton misconduct."

The courts have held that "wilful or wanton misconduct" consists of the conscious and intentional doing of a wrongful act or omission of duty with reckless indifference to consequences under circumstances which show that the doer has knowledge of existing conditions and that injury will probably result. In an attempt at preciseness, the court has said that there is a distinction between the term "wilful" and "wanton" in that "wilful" implies intent of purpose while "wanton" expresses a reckless disregard of consequences. The Supreme Court has said that to constitute "wilful or wanton misconduct," there must be a "perverse motive," in that the misconduct must be conscious and intentional and of such a nature that under the known existing conditions, injury will probably result therefrom. There is not much of a problem presented as to the definition of wilful or wanton misconduct. *Sausaman* v. *Leininger* (1957), 237 Ind. 508.

The practical problem is when does the evidence show sufficient facts to permit the submission of a particular case to a jury to determine whether the defendant was guilty of wilful or wanton misconduct, and upon this latter question there is some disagreement and inconsistency in the recent decisions of the Indiana Supreme and Appellate Courts, a number of which decisions have been by divided courts.

The principal problem presented by the last sentence of this act relates to the use of the term "gross negligence." "Gross negligence" is recognized by the courts of some states, but is not recognized in the state of Indiana. In the states which recognize it, it is defined as meaning "very great negligence," or "want of even scant care," but not equivalent to wilful or wanton conduct. *State* v. *Homme*, 226 Minn 83; *State* v. *Bolsinger*, 221 Minn. 154.

In other words, it is acts of conduct which are in between ordinary negligence and wilful or wanton misconduct—a sort of a middle ground. This middle-ground doctrine is not recognized in Indiana. As far back as 1897, the Indiana Supreme Court said:

> "* * * There can be no middle ground between willfulness and negligence, for, as we have seen, the authorities affirm that each of these elements is the opposite of the other. Consequently, when the facts in a given case show that the injury of which the plaintiff complains is the result of the negligent act or conduct of the defendant, then the fact that such negligence may be said to be of such a degree as to be considered 'gross negligence' can not support a charge that the injury was willfully or intentionally inflicted by the party accused. This rule seems to be firmly settled in this jurisdiction. * * *" *The Cleveland, etc. R. W. Co.* v. *Miller, Admr.*, 149 Ind. 490, 509-510. See also: *Coconower* v. *Stoddard*, 96 Ind. App. 287; *Union Traction Co.* v. *Berry, Adm.*, 188 Ind. 514.

However, it seems plain to me that the Legislature did intend to relax the rigid standards of medical care in cases where the physician has volunteered in an emergency and gratuitously rendered emergency care. It is an established rule that the courts will attempt to follow the legislative intent and I am hopeful that they will do so in this case.

SENATE ENROLLED ACT No. 398

AN ACT concerning medical professional corporations.

Be it enacted by the General Assembly of the State of Indiana:

SECTION 1. TITLE. This act is known and may be cited as the "Medical Professional Corporation Act."

SEC. 2. STATUTORY POLICY. This act shall be so construed as to effectuate its general purpose of making available to medical professional persons the benefits of the corporate form for the business aspects of their practices while preserving the established professional aspects of the personal

relationship between the medical professional person and those he serves.

SEC. 3. DEFINITIONS. The following terms when used in this act shall have the following meanings unless the context plainly indicates otherwise:

(a) "Professional Medical Service" means any type of professional medical service which may be legally performed only pursuant to an unlimited license to practice medicine in the State of Indiana.

(b) "Professional Medical Corporation" means a corporation organized under this act for the sole purpose of rendering a professional medical service.

(c) "Regulating Board" means the Board of Medical Registration and Examination of Indiana.

SEC. 4. SHAREHOLDERS. An individual or a group of individuals each of whom holds an unlimited license to practice medicine in the State of Indiana may organize and become a shareholder, or shareholders, of a medical professional corporation.

SEC. 5. APPLICABILITY OF THE INDIANA GENERAL CORPORATION ACT. Part I and II and Sections 70 and 71 of the Indiana General Corporation Act, Acts 1959, Chapter 215, as amended and supplemented, shall be applicable to professional corporations, including their organization and they shall enjoy the powers and privileges and be subject to the duties, restrictions and liabilities of other corporations, except where inconsistent with the provisions and purpose of this act. This act shall take precedence in the event of any conflict with provisions of the Indiana General Corporation Act.

SEC. 6. PURPOSE FOR WHICH INCORPORATED. A professional medical corporation may be organized only for the purpose of rendering professional medical service and shall not engage in any business other than rendering professional medical service. However, it may invest its funds in real estate, mortgages, stocks, bonds, or any other type of investment and may own real or personal property necessary or appropriate for rendering its professional medical service.

SEC. 7. CORPORATE NAME. The incorporators of a medical professional corporation may adopt any name for their corporation which is not contrary to law or the ethics of their profession.

SEC. 8. CERTIFICATE OF REGISTRATION. No corporation incorporated under this act shall open, operate or maintain an establishment for any of the purposes set forth in Section 6 of this act without a certificate of registration from the regulating board. Application for such registration shall be made to said board in writing and shall contain the name and address of the corporation and such other information as may be required by the board. Upon receipt of such application, the board shall make an investigation of the corporation. If the board finds that the incorporators, officers, directors and shareholders are each licensed pursuant to the Medical Practice Act and if no disciplinary action is pending before the board against any of them, and if it appears that the corporation will be conducted in compliance with the law and regulations of the board, the board shall issue, upon payment of a registration fee of $10.00, a certificate of registration which shall remain effective until January 1st following the date of such registration.

SEC. 9. ANNUAL RENEWAL. Upon written application of the holder upon a form prescribed by the regulating board, accompanied by a fee of $10.00 the regulating board shall annually renew the certificate of registration if the board finds that the corporation has complied with its regulations and the provisions of this act, which application for renewal shall be filed each year on or before January 30th.

SEC. 10. ISSUANCE AND TRANSFER OF SHARES. A medical professional corporation may issue the shares of its capital stock only to individuals who hold an unlimited license to practice medicine. A shareholder may voluntarily transfer his shares in a medical professional corporation only to an individual who holds an unlimited license to practice medicine. Any shares issued in violation of this section are null and void. The voluntary transfer of any shares transferred in violation of this section is null and void. No shares may be transferred upon the books of the medical professional corporation or issued by the professional corporation until there is presented to and filed with the corporation a certificate by the regulating board stating that the individual to whom the transfer is to be made or the shares issued holds an unlimited license to practice medicine in the State of Indiana.

SEC. 11. VOTING RIGHTS OF SHARES. No shareholder of a medical professional corporation organized under this act shall enter into a voting trust agreement or any other type agreement vesting another person with the authority to exercise the voting power of any or all of his shares.

SEC. 12. OFFICERS, DIRECTORS AND SHAREHOLDERS. No individual may be an officer, director or shareholder of a medical professional corporation who does not hold an unlimited license to practice medicine in the State of Indiana.

SEC. 13. PROFESSIONAL SERVICES THROUGH OFFICERS, EMPLOYEES, AGENTS. A professional corporation may render professional medical service only through officers, employees, and agents who themselves hold an unlimited license to practice medicine in the State of Indiana. The term "employee" as used in this section does not include clerks, bookkeepers, technicians or

other individuals who are not usually and ordinarily considered by custom and practice to be rendering professional medical services, nor does the term "employee" include any other person who performs all his employment under the direct supervision and control of an officer, agent or employee who is himself rendering professional medical service to the public on behalf of the corporation.

SEC. 14. PROFESSIONAL RELATIONSHIP PRESERVED. This act does not modify any law applicable to the relationship between a person furnishing professional medical service and a person receiving such service, including liability arising out of such professional service.

SEC. 15. PROFESSIONAL REGULATION. Nothing in this act shall restrict or limit in any manner the authority and duty of the regulating board for the licensing of individual persons rendering medical services or the practice of medicine which is within the jurisdiction of such regulating board, notwithstanding that such person is an officer, director, shareholder or employee of a medical professional corporation and rendering such professional services or engaging in the practice of medicine through such medical professional corporation.

SEC. 16. PROHIBITED ACTS. No medical professional corporation may do any act which is prohibited to be done by individual persons licensed to practice medicine.

SEC. 17. CONFLICT OF INTERESTS. If any officer, shareholder, agent or employee of a medical professional corporation becomes legally disqualified to render medical professional service within this state, or accepts employment or is elected to a public office that pursuant to existing law is a restriction or limitation upon rendering of medical professional service, he shall sever all employment with, or financial interest in, such corporation forthwith. A corporation's failure to require compliance with this provision shall be a ground for the forfeiture of its franchise. When a corporation's failure to comply with this provision is brought to the attention of the secretary of state, the secretary of state shall certify that fact to the attorney general for appropriate action to dissolve the corporation.

SEC. 18. DEATH OR DISQUALIFICATION OF SHAREHOLDERS. The articles of incorporation may provide for the purchase or redemption of the shares of any shareholder upon the death or disqualification of such shareholder, or the same may be provided in the bylaws or by private agreement. In the absence of a provision for the same in the articles of incorporation, or the bylaws, or by private agreement, the medical professional corporation shall purchase the shares of a deceased shareholder or a shareholder no longer qualified to own shares in such corporation within ninety (90) days after the death of the shareholder or disqualification of the shareholder, as the case may be. The price for such shares shall be the book value as of the month immediately preceding the death or disqualification of the shareholder. Book value shall be determined from the books and records of the medical professional corporation in accordance with the regular method of accounting used by such corporation. If the corporation shall fail to purchase said shares by the end of said ninety (90) days, then the executor or administrator or other personal representative of a deceased shareholder or any disqualified shareholder may bring an action in the probate court of the county in which the principal office or place of practice of the professional corporation is located for the enforcement of this provision. If the plaintiff is successful in such action, he shall be entitled to recover the book value of the shares involved and a reasonable attorney's fee and costs. The professional corporation shall repurchase such shares without regard to restrictions upon the repurchase of shares provided by the Indiana General Corporation Act.

SEC. 19. ANNUAL CERTIFICATE AND REPORT. A medical professional corporation shall, within thirty (30) days after the thirtieth (30th) day of June in each year, furnish a statement to the secretary of state showing the names and post office addresses of all shareholders in such corporation and shall certify that all shareholders are duly licensed or otherwise legally authorized to practice medicine in this state. The report shall be made on such form as shall be prescribed and furnished by the secretary of state, shall be signed by the president or vice-president and the secretary or an assistant secretary of the corporation, and acknowledged and sworn to before a notary public by the persons signing the report, shall be filed in the office of the secretary of state and may be accompanied or included with the regular annual report of such corporation required by The Indiana General Corporation Act as amended.

SEC. 20. FILING REQUIREMENTS AND NOTICES. The incorporators of a medical professional corporation at the same time they file their articles of incorporation with the secretary of state shall file a duplicate original of such articles with the regulating board. Thereafter the corporation shall file duplicate originals of all papers required to be filed with the secretary of state with such regulating board and at the same time. A medical professional corporation shall notify the secretary of state and the regulating board of a change in the ownership of any of the shares in the professional corporation or a change in its business address within thirty (30) days from the date of such change. Such notice shall contain the names and post office address of the transferor shareholder and the transferee shareholder, and such notice of change of business address shall contain the street address of the old location and the street address of the new location.

SEC. 21. MERGER OR CONSOLIDATION. A medical professional corporation organized under this act may consolidate or merge only with another medical professional corporation organized under this act and a merger or consolidation with any foreign corporation is prohibited.

SEC. 22. PROVISIONS SEVERABLE AND REPEALER. If any provision of this act or the application thereof to any person or circumstance is invalid, such invalidity shall not affect other provisions or applications of this act which can be given effect without the invalid provision or application, and to this end the provisions of this act are declared to be severable. All laws and parts of laws in conflict with any of the provisions of this act are hereby repealed.

MEDICAL CORPORATIONS

As I understand it, the sole purpose of sponsoring the bill which became Senate Enrolled Act 398 was to enable physicians to obtain the tax advantages and to permit the adoption of qualified pension and profit sharing plans in which untaxed income is accumulated and invested, free of tax, pending distribution after retirement, when individual surtax rates are lower.

I am not a tax expert and express no opinion on whether a corporation organized under this act will be able to obtain the tax advantages sought by obtaining the passage of the bill. I do suggest that anyone contemplating the formation of such a corporation fully explore that situation with his tax adviser as some question has been raised by some persons in that field.

This act was desired primarily by those in group practice where there are three or more physicians involved. However, inquiry is being made as to whether one physician alone may form a corporation under this act, and this article is directed to the legal and ethical questions involved in a situation where one physician desires to so incorporate.

Sections 4 and 5 of the act are as follows:

"SEC. 4. SHAREHOLDERS. An individual or a group of individuals each of whom holds an unlimited license to practice medicine in the State of Indiana may organize and become a shareholder, or shareholders, of a medical professional corporation.

"SEC. 5. APPLICABILITY OF THE INDIANA GENERAL CORPORATION ACT. Part I and II and Sections 70 and 71 of the Indiana General Corporation Act, Acts 1959, Chapter 215, as amended and supplemented, shall be applicable to professional corporations, including their organization and they shall enjoy the powers and privileges and be subject to the duties, restrictions and liabilities of other corporations, except where inconsistent with the provisions and purpose of this act. This act shall take precedence in the event of any conflict with provisions of the Indiana General Corporation Act."

Section 4 is the same as Section 3 of the bill introduced by certain lawyers in the 1961 session as S. B. 73, except modified to limit it to physicians holding an unlimited license. Sec. 5 is taken from Sec. 13 of said act with some changes.

Part II of the General Corporation Act, which is adopted by above Sec. 5, requires at least three incorporators and at least three directors. Sec. 4 provides "An individual * * * may organize and become a shareholder * * * of a medical professional corporation." If this means that one physician can alone organize and perfect a corporation, it would be in conflict with Part II of the General Corporation Act requiring three incorporators and three directors. Sec. 5 expressly provides "This act shall take precedence in the event of any conflict with provisions of the Indiana General Corporation Act."

It can, therefore, be argued that as a matter of statutory construction there could be only one incorporator and one director. However, Sec. 4 may be said to relate to the number of shareholders only and, therefore, not in conflict with the requirement of three incorporators and three directors. This presents a question of statutory construction and also presents a question of whether a one-man corporation could qualify under the Federal Regulations. In an article by the legal department of the AMA this is said:

> "* * * The Regulations do not directly consider the tax status of the 'one-man organization,' nor do they provide a basis for a definite statement of the manner, if any, in which a sole practitioner could secure corporate tax treatment. Nevertheless, Section 5 of the Florida Professional Service Corporation Act expressly authorizes organization of a professional association, which may practice medicine, by a single individual.
>
> "Regulations § 301.7701-2(a)(2) recognizes the existence of 'the so-called one-man corporation' but does not state whether an organization which under local law constitutes a one-man corporation may be treated as a corporation for tax purposes. Clearly, such an organization has no 'associates,' and it is difficult to see how the concepts of centralization of management and free transferability of interest, as defined in the Regulations, can be meaningful in the context of the one-man corporation. Arguably, continuity of legal existence and limited liability are the chief points of distinction between a sole proprietorship and a one-man corporation, and if a difference of tax status is to be accorded it must rest on the presence or absence of these two characteristics."

Under the above quotation it would seem unsafe to rely on the tax benefits sought in a one-man

corporation until there is a tax determination even if one could be formed under the Indiana Act. The AMA Law Department recommendation is at least three physicians.

We do not believe the problem can be answered by having two additional lay persons as directors, but without their being stockholders. This would conform to the General Corporation Act as a director is not required to be a stockholder, but the board of directors has full management and control of the business of the corporation. This would put control of medical matters in persons not licensed as physicians.

One possible solution might be to persuade two physician friends to act as directors. They would not need to be employees or perform any medical services and the time required to act only as a director would not be substantial. However, in many instances this might not be practical.

SENATE ENROLLED ACT No. 477

AN ACT concerning hospital and hospital staff medical records information and data.

Be it enacted by the General Assembly of the State of Indiana:

SECTION 1. It is in the interest of public health and patient medical care that in-hospital medical staff committees have access to the records, information, and other data relating to the condition and treatment of patients in such hospital, to study and evaluate for the purpose of evaluating matters relating to the care and treatment of such patients for research purposes and for the purpose of reducing morbidity or mortality and obtaining statistics and information relating to the prevention and treatment of diseases, illnesses, and injuries. To carry out such purposes, any hospital, its agents and employees may provide medical records, information, and other data relating to the condition and treatment of any patient in said hospital to any in-hospital medical staff committee. All such records, data, and information shall be confidential and privileged to said committee and the members thereof, as though such hospital patients were the patients of the members of such committee. All proceedings and in-hospital records and reports of such medical staff committees shall be confidential but subject to being produced on court order in a cause where material or relevant to the issues in such cause.

SEC. 2. Such in-hospital medical staff committees shall use or publish information from such material only for the purpose of evaluating matters of medical care, therapy, and treatment and for research and statistical purposes. Neither such in-hospital medical staff committee nor the members, agents, or employees thereof shall disclose the name or identity of any patient whose records have been studied in any report or publication of findings and conclusions of such committee, but such in-hospital medical staff committee, its members, agents, or employees shall protect the identity of any patient whose condition or treatment has been studied and shall not disclose or reveal the name of any such in-hospital patient.

CONFIDENTIALITY OF MEDICAL RECORDS

The 1963 session of the General Assembly adopted Senate Enrolled Act No. 477, which will become a law upon the distribution of the acts and the proclamation of the Governor.

This act concerns hospital and hospital staff medical records information and data and the use of medical records, information, and other data relating to the condition and treatment of any patient in a hospital by any in-hospital medical staff committee.

There have been some questions raised from time to time of the right of an in-hospital staff committee to examine and review the medical records of the patient in the hospital. This arises by virtue of the section in the statutes of Indiana, which provides, in part, as follows:

> "*2-1714. Who are incompetent.*—The following persons shall not be competent witnesses:
>
> * * *
>
> Fourth. Physicians, as to matter communicated to them, as such, by patients, in the course of their professional business, or advice given in such cases."

Under the above statute, the courts of the state have held that this makes confidential and privileged any and all information acquired by a physician while attending a patient in a professional capacity, and that this includes all that he sees or observes while so acting as to matters communicated by the patient.

In the case of *Cincinnati, etc. R. Co.* v. *Gross*, 186 Ind. 471, at pages 476 and 477, the Supreme Court of this state said:

> "* * * Our statute (§ 520 Burns 1914, § 497 R. S. 1881) provides that physicians shall not be competent witnesses 'as to matter communicated to them, as such, by patients, in the course of their professional business, or advice given in such cases.' This enactment has consistently been construed by this court as covering a broader field than is indicated by the literal meaning of the words employed, and, so construed, it renders the physician incompetent to disclose information acquired by him while attending a patient in a professional capacity. This includes all that he sees or observes, while so acting, as to matters communicated by the patient. *Towles* v. *McCurdy* (1904), 163 Ind. 12, 14, 71 N. E. 129. The rule, which is a beneficient one, is not to be lightly broken down (*Nordyke & Marmon Co.* v. *Whitehead* (1914), 183 Ind. 7, 14, 106

N. E. 867), and we hold that the offered evidence was properly excluded."

The making of such communications between a physician and a patient of a medical nature, and the facts learned by the physician in connection with his treatment of the patient, privileged and confidential is stated in the case of *Brackney* v. *Fogle*, 156 Ind. 535 at page 538, as follows:

"* * * The purpose of the statute has its roots in public policy, and is intended to promote that confidence and full disclosure often absolutely necessary to a correct treatment of the patient, and which may be withheld under impending danger of publication. The origin of the rule is of very great antiquity and has never failed of enforcement by the courts so far as we have observed; and when the legislature of our State in 1861 (Acts 1861, p. 62), and again in 1881 (Acts 1881, p. 289, §§ 274, 275), extended the right to testify, first to all white persons, and then to all persons, except the classes specified, it was at both times deemed expedient to include within the exception the facts learned by a physician when professionally attending a patient. And so the statute stands and has stood for forty years, in certain and unambiguous terms, clearly guaranteeing protection to every patient while living, and after he is dead. * * *"

In the case of *Pence* v. *Myers*, 180 Ind. 282, a death certificate showing the cause of death was offered in evidence. The court held that the physician could not testify as to the cause of death, without the privilege being waived by one who stood in the place of the decedent, and the same privilege attached to the physician's statement of the cause of death on the death record.

Because of the statute and these decisions and other similar decisions, the question has been raised as to whether anyone, including other physicians, has a right to examine the medical record of a patient in a hospital, without the patient's consent.

Section 1 of Senate Enrolled Act No. 477 authorizes the examination by any in-hospital medical staff committee of the medical records, information, and other data relating to the condition and treatment of any patient in the hospital. It then provides that such records, data, and information shall be confidential and privileged to the committee, as though such patients were the patients of the members of the committee. This clarifies and makes definite the right of in-hospital staff committees to examine the medical records of any patient in the hospital.

However, it makes such records and information carry the same privilege and confidential nature to the members of such committee as existed in the physician of such patient. This means, however, that any particular patient still has the right to waive the privilege, as the privilege is for the benefit of the patient.

Such records could be ordered produced in court by court order to the same extent and under the same circumstances that a court can order any physician to produce the records of a patient. This does not mean that because such records are ordered produced, that they would be admissible or could be used. That would still have to be determined by the court in a particular case after production, and the court would still have to pass upon the privileged and confidential nature, and whether or not such privilege had been waived.

Under Sec. 2 of said act, the in-hospital medical staff committees may use and publish information from such records and material only for the purpose of evaluating matters of medical care, therapy, and treatment and for research and statistical purposes. However, in so doing such in-hospital medical staff committee, its members, agents, or employees are prohibited from disclosing the name or identity of any patient whose records have been studied in any report or publication of finding and conclusions of such committee, and they are required to protect the identity of such patient, whose condition or treatment has been so studied.

HOUSE ENROLLED ACT No. 1129

AN ACT concerning the gift by will or other written instrument, of the whole or any part of the human body.

Be it enacted by the General Assembly of the State of Indiana:

SECTION 1. Every person of testamentary capacity may give by will or other written instrument executed during that person's lifetime, the whole or any part of his body or her body to the State Anatomical Board; or to any college or university, or other person, corporation, association, or agency, public or private, and which is willing and equipped to receive and to use the same, for scientific, educational, therapeutic, or medical use, including anatomical banks and similar uses and purposes. Any such testamentary or other disposition of such person's body or parts thereof shall take effect immediately upon death, unless otherwise expressly provided in such will or other written instrument and the gift shall become effective immediately upon death.

SEC. 2. If the instrument making the gift does not purport to be a will, it shall be executed by the donor or by some person in his presence and at his direction and attested to, in the presence of the donor, by two or more credible witnesses. The instrument shall become immediately effective upon the donor's death.

SEC. 3. No person acting in good faith pursuant to the direction of such will or instrument and without knowledge of a subsequent revocation thereof shall be liable for so doing, notwithstanding the subsequent revocation in whole or in part was made by a will, codicil, or other instrument.

WILLING OF THE BODY BILL

The 1961 session of the Legislature passed House Bill No. 1129, which authorizes every person of testamentary capacity to bequeath by will the whole or any part of his or her body to the State Anatomical Board or to any college or university, or other person, corporation, association, or agency, public or private, and which is willing and equipped to receive and to use the same for scientific, educational, therapeutic, or medical use, including anatomical banks and similar uses and purposes.

It is also provided in this act that this may also be done by other written instrument executed during such person's lifetime, if it be done by the donor in the presence of two (2) or more witnesses, who are of lawful age and who sign such instrument as such witnesses.

It is further provided in this act that such testamentary or other written disposition of such person's body or parts thereof shall take effect immediately upon death, unless otherwise expressly provided in his or her will or such other instrument.

Any person acting in good faith, pursuant to the provisions of such a will or other written instrument and without knowledge of any subsequent revocation thereof, shall not be liable for so doing notwithstanding any subsequent revocation, in whole or in part, made by any subsequent will, codicil, or other instrument.

The purpose of this bill was to clarify and make certain the law on this subject in the state of Indiana. It had previously been held by the courts of this state that the bodies of the dead are subject to the rights of the surviving heirs. *Meek* v. *State* (1933), 205 Ind. 102, 106; *Renihan et al.* v. *Wright et al.* (1890), 125 Ind. 536, 543.

There had been indications in at least one case that a person had a right to make disposition of his body during his lifetime. *Aetna Life Insurance Co.* v. *Burton* (1937), 104 Ind. App. 576, 581. However, that was not a clear-cut decision and with the law somewhat uncertain as to whether a testamentary or other disposition of a person's body, or parts thereof, would supersede the legal rights of the heirs or next of kin, this act was adopted to clarify and make those rights certain.

HOUSE ENROLLED ACT No. 1343

AN ACT making it unlawful to tattoo a human being and providing penalties therefor.

Be it enacted by the General Assembly of the State of Indiana:

SECTION 1. It shall be unlawful for any person to tattoo a human being, except that tattooing may be performed for medical purposes, or where provided by law, and under the direct supervision of a person holding an unlimited license to practice medicine.

SEC. 2. Any person who violates the provisions of this act shall, upon conviction thereof, be fined by a court of competent jurisdiction a sum not less than fifty dollars ($50.00) nor more than five hundred dollars ($500.00) to which may be added imprisonment in the county jail for not to exceed thirty (30) days, and each violation shall constitute a separate offense.

THE TATTOOING BILL

Tattooing has become a public health problem. The transmission of epidemic hepatitis has been traced to the tattooer often enough to warrant outlawing the practice. Observation of hepatitis in recently tattooed soldiers stationed at Fort Knox, Kentucky, was reported to officials of Floyd County, Indiana. As a result the above law was recommended and passed.

MOTOR VEHICLE LAWS AND THE EPILEPTIC

Burns' Ind. Stat., Ann., 1949 Replacement:

Sec. 35-271. Epilepsy—Similar disorders characterized by lapses of consciousness—Physicians to report. All physicians shall report within ten (10) days to the state board of health in writing, the name, age, and address of every person so diagnosed by him as a case of epilepsy or similar disorders characterized by lapses of consciousness. (Acts 1947, ch. 9, § 1, p. 48.)

Sec. 35-272. Epilepsy—Reports to bureau of motor vehicles by state board of health. The state board of health shall on the first business day of each month report to the bureau of motor vehicles the names, ages and addresses of all persons reported to it as cases of epilepsy by the physicians. (Acts 1947, ch. 9, § 2, p. 48.)

Sec. 35-273. Reports confidential—Information solely to determine eligibility of operators. Such reports shall be for the information of the bureau of motor vehicles in enforcing the provisions of motor vehicle laws administered by the bureau, and shall be kept confidential and used solely for the purpose of determining the eligibility of any person to operate a motor vehicle on the highways of this state. (Acts 1947, ch. 9, § 3, p. 48.)

Sec. 35-274. Penalty for failure to report cases of epilepsy. Any person required under this act §§ 35-271—35-274) to report such cases of epilepsy who fails so to do, as provided for in this act, shall be guilty of a misdemeanor and upon conviction shall be fined in any sum not exceeding one hundred dollars ($100). (Acts 1947, ch. 9, § 4, p. 48.)

Burns' Ind. Stat., Ann., 1949 Replacement, Pamphlet Part:

Sec. 35-275. Epilepsy—Reports to board of health. All physicians shall report within ten (10) days to the state board of health in writing, the name, age and address of every person so diagnosed by him as a case of epilepsy or other similar

disorders characterized by lapses of consciousness. (Acts 1951, ch. 40, § 1, p. 96.)

Sec. 35-276. Epilepsy—Report to aeronautics commission and department of safety responsibility and drivers' improvement, bureau of motor vehicles. The state board of health shall on the first business day of each month report to the aeronautics commission and department of safety responsibility and drivers improvement, bureau of motor vehicles the names, ages and addresses of all persons reported to it as cases of epilepsy or other similar disorders characterized by lapses of consciousness by the physicians. (Acts 1951, ch. 40, § 2, p. 96.)

Sec. 35-277. Reports confidential—Information solely to determine eligibility of operators. Such reports shall be for the information of the aeronautics commission and department of safety responsibility and drivers improvement, bureau of motor vehicles in enforcing the provisions of the aeronautical laws and the motor vehicle and drivers license laws of the state, and shall be kept confidential and used solely for the purpose of determining the eligibility of any person to operate an aircraft in the air or on the ground or water over or in this state, and to operate a motor vehicle over or on the highways of this state. (Acts 1951, ch. 40, § 3, p. 96.)

Sec. 35-278. Penalty for failure to report cases of epilepsy. Any person required under this act (§§ 35-275—35-278) to report such cases of epilepsy of other similar disorders characterized by lapses of consciousness who fails to do so, as provided for in this act, shall be guilty of a misdemeanor and upon conviction shall be fined in any sum not exceeding one hundred dollars ($100). (Acts 1951, ch. 40, § 4, p. 96.)

Burns' Ind. Stat., Ann., 1952 Replacement:

Sec. 47-2704. Persons not to be licensed. The department shall not issue any license or permit hereunder:

* * *

(d) To any person who has previously been adjudged insane, feebleminded, or an idiot, imbecile, or epileptic and has not at the time of application been restored to competency by judicial decree, or released from a hospital for the insane or feebleminded upon a certificate of the superintendent of such hospital that such person is competent, nor then unless the commissioner is satisfied that such person is competent, to operate a motor vehicle with safety to persons and property.

(e) To any person, who, in the opinion of the department is afflicted with, or suffering from, such physical or mental disability or disease as will serve to prevent such person from exercising reasonable and ordinary control over a motor vehicle, while operating such vehicle upon the public highways.

* * *

(i) To any person, when the commissioner has good cause to believe that the operation of a motor vehicle on a public highway of this state, by such person, would be inimical to public safety or welfare. (Acts 1945, ch. 304, § 52, p. 1308.)

(The 1963 laws have not been published and, consequently, this memoranda would not contain any section bearing thereon adopted by the 1963 session, if any.) ◄

The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

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Penicillin Hypersensitivity

"The patient who died was a 23-year-old Negro man who was admitted to the clinic on March 16, 1960, with a diagnosis of anterior urethral gonorrhea. He had been treated for gonorrhea on November 12, 1959, and again on February 3, 1960, with 1,200,000 units of benzathine penicillin G without difficulty. On March 16 the patient was again given the same dose of this drug. . . . The patient was pronounced dead approximately 40 minutes following treatment."[1]

This case represents one of the 100 to 300 fatal reactions to penicillin which occur each year in the United States.[2] While penicillin remains one of our most useful drugs, the hazards associated with its use deserve re-emphasis. When will you see such a case? What precautions should be observed?

Most reactions consist of skin rashes and a serum-sickness-like syndrome, with urticaria and arthralgia. However, anaphylaxis, the acute immediate reaction, with unconsciousness, collapse and anaphylactic death is by no means rare.

In a group of 6,832 patients who had received penicillin, acute immediate reactions occurred in seven patients. These anaphylactic episodes were associated only with injectable forms of the antibiotic.[3] The incidence of reactions of all types, immediate or delayed, was 3.8% in patients receiving intramuscular benzathine penicillin, 1.4% in cases given parenteral procaine penicillin and crystalline penicillin, and only 0.5% in individuals who took oral penicillin.

In a survey of more than 800 United States hospitals, 2,517 cases of penicillin reactions were observed during the years 1954 through 1956. With intramuscular penicillin, 611 episodes of anaphylaxis with 63 deaths occurred. With oral penicillin, there were 49 cases of anaphylaxis, but no deaths.[4]

Severe reactions to penicillin are most likely to occur following repeated intramuscular injections of the antibiotic. Immediate acute hypersensitivity reactions may occur following oral administration but are much less common.

Treatment of the anaphylactic response requires prompt administration of epinephrine and oxygen. Dosage of epinephrine is 0.5 cc. subcutaneously or intramuscularly, and repeated every five to ten minutes for three doses as needed. Some

feel the intravenous route also should be used because of the extreme urgency of these situations. Death may occur in a few minutes. Epinephrine, 0.1 cc. in 10 cc. saline may be injected slowly by vein after the initial subcutaneous dose.[5]

A tourniquet is applied proximal to the site of the penicillin injection. An adequate airway must be maintained. Oxygen may be given by mask using intermittent positive pressure. Only after these essential therapeutic measures have been initiated is intravenous infusion of isotonic saline or 5% dextrose solution begun. Corticosteroids are added to the infusion. Aminophylline may relieve bronchospasm. Norepinephrine may be used to maintain blood pressure. Antihistimines, penicillinase, ACTH and corticosteroids do not act rapidly enough to counteract the immediate acute reaction,[6-8] but are useful in the management of delayed effects.

Because of the frequency and severity of reactions, what precautions should be considered?

Coroners have been admonished to review the following questions in deaths suspected of having resulted from penicillin reactions: "Were previous reactions in the patient ignored? Was there an inquiry into the allergic status of the patient and his family? Were skin tests made, and what was the result? How were the skin tests performed? What other precautions were taken? What was the treatment when the reaction occurred in the patient?"[9]

Obviously, penicillin should be used only when specifically indicated. Selective use not only will reduce the number of reactions, but also will prevent unnecessary sensitization of patients.

Oral penicillin should be preferred, except in the most serious infections. The development of acid-stable phenoxymethyl penicillin (penicillin V) provides reliable penicillin therapy by the oral route.[10,11] The likelihood of penicillin sensitization is least when the drug is given by the oral route, greater when given by intramuscular injection, and greatest with topical use.[12]

If injection of penicillin is necessary, it should be given low enough in an extremity to allow application of a tourniquet. Simultaneous administration of antihistamines is not effective in preventing serious reactions.

If there is even suggestive evidence of a prior penicillin reaction, other antimicrobial drugs should be considered. It has not been established that the new derivatives of penicillin can be used safely in penicillin-sensitive individuals. Patients with a personal or family history of allergy should be treated with agents other than penicillin when possible.

Unfortunately, a negative conjunctival or skin test cannot be relied on to definitely indicate the presence or absence of penicillin allergy. A positive test indicates that administration of penicillin in any form is extremely hazardous. A negative test does not exclude the possibility of a penicillin reaction.

Nevertheless, if there is a question of penicillin hypersensitivity it may be advisable, for clinical and medico-legal reasons, to perform skin tests.

One procedure that can be considered[13] is a scratch test, made with crystalline penicillin, 50,000 units per cc. in a water or saline solution. If negative by scratch test, the patient is tested intradermally with 0.02 cc. of a sterile penicillin solution containing 1000 units per cc. If a scratch test is not made first, the initial intradermal test solution should contain only ten units per cc., and should be followed by the stronger concentration. Procaine sensitivity is unusual, but should be tested separately if considered.

Skin tests for penicillin sensitivity are not without hazards. A severe constitutional reaction has been reported in a patient whose intracutaneous test dose was 0.01 cc. of a solution of penicillin containing only 1000 units per cc.[14]

It is estimated that 5 to 15% of our patients have the potential of becoming sensitized to penicillin.[15] Children as well as adults are experiencing allergic responses

to the antibiotic.[16] Many patients take the drug repeatedly without difficulty, but a reaction may occur after many previous uneventful courses of treatment.

The care with which we use this valuable drug in an individual patient now will determine whether or not it can be used in that patient for some future life-threatening infection.

To summarize: Reactions to penicillin are often serious and even cause from 100 to 300 deaths each year in the United States. The oral route of administration is by far the safest and should always be used if possible. Patients should be questioned as to allergic phenomena prior to receiving penicillin by any route, and should be tested for sensitivity if there is any question. Prompt and vigorous treatment should be instituted if a reaction develops.

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About Our Cover

North, South, East or West? A weather vane can show you at a glance which direction the wind is blowing.

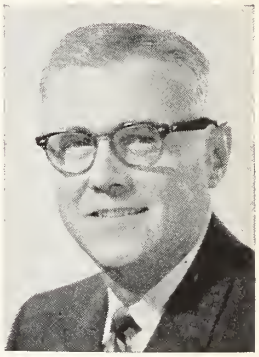
To find the address of a colleague, the nearest Poison Control Center, approved hospital or licensed nursing home or a list of the Class A narcotic drugs, is not quite as simple.

However, the *Annual Roster and Yearbook* of your *Journal* can greatly simplify these problems for you, and we feel sure that you will want to keep this issue of *The Journal* on your desk, readily available for quick reference.

Your office staff will also find the *Roster* very useful, so remember, extra copies may be purchased from the office of *The Journal* at the Association's Headquarters.—M.E.R.

President's Page

It is unusual at any three-day medical meeting to have 90 or 95% of the delegates eagerly listening to the closing remarks. But that is exactly what happened when almost 2,100 delegates attended the First Congress on Mental Health sponsored by the American Medical Association, the American Psychiatric Association, and the National Association for Mental Health last October in Chicago. Out of this meeting came the recognition by the American Medical Association that mental health is our number one medical problem and that physicians must accept the responsibility for solving it, not only at the national and state level but at the county and community levels as well. Many seasoned convention-goers commented that this was the most exciting meeting they had ever attended.



Indiana was well represented at the meeting and our delegation included 18 members of the Indiana Steering Committee who later developed *A Statement About Mental Health and Mental Retardation* which appeared in December's *I.S.M.A. Journal*, pages 1887 to 1889.

The position of the American Medical Association that the profession has the clear responsibility to assume leadership in mental health affairs was greatly strengthened when 44 out of our 84 county societies met with professional and lay leaders February 20, 1963, in Indianapolis. This turnout of ISMA members gives real meaning to our policy to serve as the catalytic agent in helping carry out present mental health plans and to develop new ones.

Each of us has two roles to play—as a physician and as a citizen. As physicians we are obligated to take care of the mental as well as the physical health of the patients in our community. All of us are busy but we must carry out our rightful responsibility. While all citizens bear responsibility for the care of the mentally ill and mentally retarded, the county medical society must be the spearhead for the necessary development and maintenance of adequate facilities and services. Emergency hospitalization for the mentally ill should be provided in each community. No longer should psychiatric patients languish in jails. The family physician should examine and evaluate his psychiatric patients and should also examine others at the request of the court. Physicians should treat all patients including those returning from state mental hospitals. Non-psychiatric physicians can enroll in the postgraduate course in psychiatry offered by Indiana University School of Medicine in cooperation with the Department of Mental Health and the county medical society.

As citizens we should willingly accept the responsibility of leadership in our communities to work with *all* organizations concerned with mental health problems. County chapters of the Indiana Association for Mental Health have for years been active in the mental health movement and offer guidance in cooperative development of mental health programs. You will be called upon to offer leadership in a self-survey to evaluate the community needs regarding mental health.

State hospitals treat more and more patients who seek admission on a voluntary basis and are now a part of the community service picture. Seventy percent of admissions to state mental hospitals are discharged from treatment within 12 months. This, of

course, explains why Dr. Ginsberg, Commissioner of Mental Health, has emphasized to all hospital superintendents that within their staffing limitations, they must make every effort to cooperate with the communities they serve and to offer consultation to private physicians. This effort means that state mental hospitals now consider each patient a responsibility of the community until the patient returns to his community and his own physician.

Each physician must face this challenge. Let us demonstrate that organized medicine does accept these responsibilities. Each county medical society by establishing a Committee on Mental Health can offer leadership in this important aspect of medicine.

Maurice E. Stocke

IN DIARRHEAS



Patient: W. O. **Age:** 45 **Sex:** F **Weight** 96

Diagnosis: Functional diarrhea

Results: Definite **Side Effects:** None

Comment: Patient has been on R-1132 (Lomotil) for fifteen months with definite improvement.

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By reducing excess propulsive motility, Lomotil assures safe, selective symptomatic control of virtually all diarrheas.

Dosage: For adults the recommended initial dosage is two tablets (2.5 mg. each) three or four times daily. Lomotil maintenance dosage may be as low as two tablets daily.

Lomotil is supplied as unscored, uncoated white tablets of 2.5 mg. and as liquid containing 2.5 mg. in each 5 cc. A subtherapeutic amount of atropine sulfate (0.025 mg.) is added to each tablet and each 5 cc. of the liquid to discourage deliberate overdosage. Recommended dosage schedules should not be exceeded.

Note: Lomotil is an exempt preparation under Federal narcotic statutes.

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Research in the Service of Medicine

The Woman's Auxiliary

REPORTS TO ISMA

The 19th House of Delegates of the Woman's Auxiliary to the Indiana State Medical Association met at the Marott Hotel in Indianapolis on April 25th and 26th.

The capable leadership of Mary Johnson, the zealous loyalty of committee chairmen and the enthusiastic response of the auxiliary membership were manifested in the reports of achievements for the year. The nearly $15,000.00 (not complete) contribution to AMA-ERF, the tons of medical equipment and supplies sent to Medical Relief, Inc., and the participation in educational programs for the public are all accomplishments of which we can be justly proud.



Mrs. L. G. Auberlin, organizer and president of World Medical Relief, Inc., captivated the members as she told what has been done, how it was accomplished and the many things we can do for the sick and poor throughout the world.

The film "Operation Hometown" was enthusiastically received and the questions asked: "Is the film available for county auxiliaries? What can we do? When can we start working?" proves again that the auxiliary member is anxious to do her part.

The bylaws were amended to eliminate the districts as organized business groups within the auxiliary. We have not been able to attract enough members to the district meetings to conduct business, or present much of an auxiliary program. There were a few exceptions, but we have found over the years, that we cannot depend upon the district meetings to accomplish the communication necessary to inform our members of the auxiliary program. The auxiliary members within the district can plan social events if they wish, assist the ISMA in planning the entertainment for the district meeting, but are not responsible for a report to the state auxiliary. No councilor need be elected.

Our many thanks go to all who helped in making the House of Delegates most enjoyable. Special thanks go to Grant County Auxiliary for the tote bags, Mrs. John Deever and her convention committee and to Mary Johnson for an outstanding and memorable meeting.

Zelda K. Sullivan

ROSTER OF MEMBERS



Indiana State Medical Association

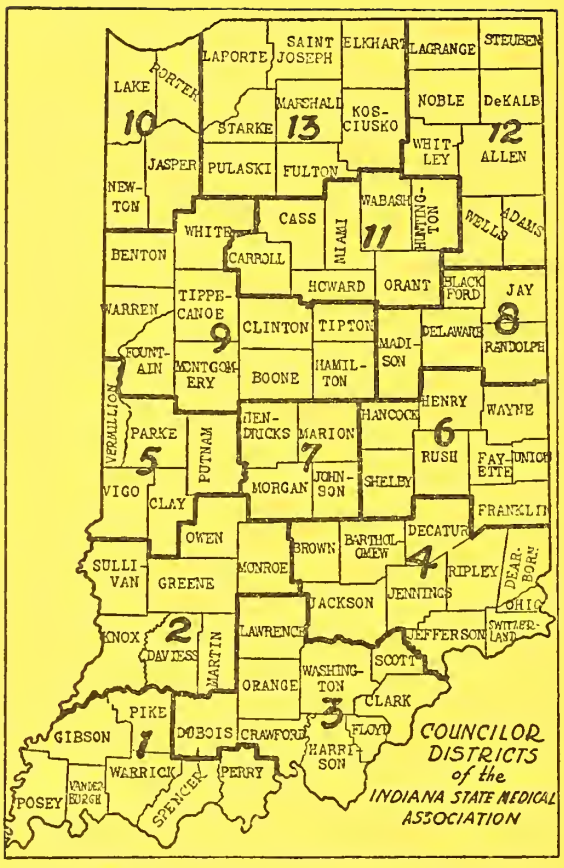
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June 1963

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COUNCILOR DISTRICTS of the INDIANA STATE MEDICAL ASSOCIATION

Membership Roster

INDIANA STATE MEDICAL ASSOCIATION

Following is a list of paid-up members of the Indiana State Medical Association as of May 1, 1963.

The letter (S) following a name indicates that the physician is a senior member of his local society and of the Indiana State Medical Association. The letter (H) following a name indicates that the physician is an honorary member of his local society and the Indiana State Medical Association.

Physicians are listed in the county medical society in which they hold membership.

Names of members who have died during the year do not appear in this list.

If any errors are found in this list, please report them to THE JOURNAL, 3935 N. Meridian, Indianapolis 8, Indiana. The cooperation of members is urgently requested.

ALPHABETICAL LIST OF MEMBERS

For street addresses, see roster of members by counties, p. 691

Name	City	County
	A	
Aagesen, Walter J.	Anderson	Madison
Abell, Charles F.	Marion	Grant
Able, Walter	Columbus	Bartholomew-Brown
Abramson, Allan L.	Gary	Lake
Acher, Robert P.	Greensburg	Decatur
Acker, Robert B. (S)	South Bend	St. Joseph
Acre, Robert R.	Evansville	Vanderburgh
Adair, Samuel L.	Jeffersonville	Clark
Adair, William K. (S)	Crothersville	Jackson-Jennings
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Adams, E. Wade	Fort Wayne	Allen
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Adams, William B.	Muncie	Delaware-Blackford
Adamski, Michael S.	Logansport	Cass
Addleman, Robert H.	Indianapolis	Marion
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Ade, Mary Keller	Lafayette	Tippecanoe
Adkins, Harold C.	Indianapolis	Marion
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Adler, Edmund R.	Dyer	Lake
Adler, Raymond N.	Evansville	Vanderburgh
Adney, Frank B.	Richmond	Wayne-Union
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Agana, Adriano A.	Gary	Lake
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Aiken, Milo M.	Plainfield	Hendricks
Aiken, Nevin E.	Fort Wayne	Allen
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B

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Benedict, Paul F.	Indianapolis	Marion
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Benken, Lawrence D.	Muncie	Delaware-Blackford
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Bennett, Ivan F.	Indianapolis	Marion
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Bernard, Marvin R.	Gary	Lake
Berner, Herbert W. Jr.	Indianapolis	Marion
Bernoske, Daniel G.	Gary	Lake
Berry, John M.	Indianapolis	Marion
Best, Robert C.	Whiting	Lake
Bethea, Dennis A. (S)	Hammond	Lake
Bethea, Robert O.	Farmersburg	Sullivan
Beutler, Theodore V.	Fort Wayne	Allen
Beverland, Malon E. (S)	Indianapolis	Marion
Biasini, Benedict A.	South Bend	St. Joseph
Bibler, Henry E.	Muncie	Delaware-Blackford
Bibler, Lester D.	Indianapolis	Marion
Bickel, David A.	South Bend	St. Joseph
Bickers, Everett E.	New Albany	Floyd
Bidney, Evelyn B.	Bloomington	Owen-Monroe
Bigler, Frederick W.	Goshen	Elkhart
Bill, Robert O.	Indianapolis	Marion
Billings, Elmer R.	Elkhart	Elkhart
Billingsley, John S.	Fort Wayne	Allen
Bills, R. James	Gary	Lake
Bills, Robert N.	Gary	Lake
Birdzell, John P.	Crown Point	Lake
Birmingham, Peter J. (S)	South Bend	St. Joseph
Birum, Patricia J.	Union City	Randolph
Bisgyer, Jay L.	Gary	Lake
Bishop, Harry A.	Frankton	Madison
Bissonnette, Roger P.	Evansville	Vanderburgh
Bivin, James H.	Mooresville	Morgan
Bixler, Donald P.	Anderson	Madison
Bixler, James A.	Berne	Adams
Bixler, Louis C.	South Bend	St. Joseph
Bizer, Mier A.	Jeffersonville	Clark
Black, Boyd K.	Vincennes	Knox
Black, Edgar K.	Circleville, O.	Wabash
Black, Henry R.	Indianapolis	Marion
Black, M. James	Brownsburg	Hendricks
Black, Joe M.	Seymour	Jackson-Jennings
Blackburn, Erwin	Westville	St. Joseph
Blackburn, Howard R.	Noblesville	Hamilton
Blackford, Florence	Indianapolis	Marion
Blackford, Ralph E.	Indianapolis	Marion
Blackwell, Donald S.	Indianapolis	Marion
Blaisdell, Glenn D.	Kokomo	Howard
Blake, Albert L.	Indianapolis	Marion
Bland, Jack D.	Holland	Dubois
Blassaras, Crist	Anderson	Madison
Blatt, A. Ebner	Indianapolis	Marion
Blazey, Arthur G.	Washington	Daviess-Martin
Bledsoe, James G.	New Castle	Henry
Blessinger, Louis H.	Corydon	Harrison-Crawford
Blessinger, Paul J.	Jasper	Dubois
Blichert, Peter A.	Fort Wayne	Allen
Blix, Fred M.	Ladoga	Montgomery
Bloemker, Edward F.	Indianapolis	Marion
Bloom, Asa W.	Marion	Grant
Bloom, George R.	Elkhart	Elkhart
Bloomer, Richard S.	Rockville	Parke-Vermillion
Blosser, Blaine A. (S)	Fremont	Steuben
Blosser, Howard V. (S)	Fort Wayne	Allen
Blossom, Paul W.	Richmond	Wayne-Union
Blum, Leon L.	Terre Haute	Vigo
Boaz, William D.	Wabash	Wabash
Bobb, Kenneth E.	Seymour	Jackson-Jennings
Bodnar, Leslie M.	South Bend	St. Joseph
Bogan, William C.	South Bend	St. Joseph
Bogardus, Carl R.	Austin	Scott
Boggs, Eugene F.	Indianapolis	Marion
Bohner, Caryle B.	Hidalgo, Mexico	Marion
Bolin, Robert C.	Lafayette	Tippecanoe
Boling, Frederick F.	St. Louis, Mo.	Marion
Boling, Grover C.	Indianapolis	Marion
Boling, Richard	Elkhart	Elkhart
Bolman, Ralph M.	Fort Wayne	Allen
Bomalaski, Martin D.	Indianapolis	Marion
Bomba, Brad	Bloomington	Owen-Monroe
Bombar, Leslie E.	Hammond	Lake
Bonaventura, Angelo P.	East Chicago	Lake
Bond, George S. (S)	Indianapolis	Marion
Bond, Virginia	Indianapolis	Marion

Name	City	County
Bond, Walter C.	Clay City	Clay
Bond, William H.	Indianapolis	Marion
Bonsett, Charles A.	Indianapolis	Marion
Booher, Norman R.	Indianapolis	Marion
Booher, Olga Bonke	Indianapolis	Marion
Booker, Harold E.	Indianapolis	Marion
Boone, Robert D.	Evansville	Vanderburgh
Boonstra, Charles E.	Bluffton	Wells
Booth, Boynton H.	Indianapolis	Marion
Booth, Franklin M.	South Bend	St. Joseph
Booze, James H.	Indianapolis	Marion
Bopp, Henry W., Jr.	Terre Haute	Vigo
Bopp, James	Terre Haute	Vigo
Borak, Walter J.	Gary	Lake
Boren, Paul R.	Poseyville	Posey
Bornstein, Herschel	Gary	Lake
Borland, Raymond M.	Bloomington	Owen-Monroe
Borough, Lester D.	South Bend	St. Joseph
Bosch, Ralph	Seymour	Jackson-Jennings
Bosler, Howard A.	Waterford Mills, mail Goshen	Elkhart
Bossard, John W.	Fort Wayne	Allen
Boswell, Robert W. C.	Evansville	Vanderburgh
Botkin, Charles (S)	Muncie	Delaware-Blackford
Botkin, Clyde G.	Muncie	Delaware-Blackford
Botkin, Thomas	Muncie	Delaware-Blackford
Boughman, Joseph D.	Kokomo	Howard
Bowdoin, George E. (S)	Elkhart	Elkhart
Bowen, Otis R.	Bremen	Marshall
Bowers, Charles R.	Anderson	Madison
Bowers, Copeland C.	Kokomo	Howard
Bowers, Gah T.	Fort Wayne	Allen
Bowers, Garvey B.	Kokomo	Howard
Bowers, George W.	Indianapolis	Marion
Bowers, John A.	Indianapolis	Marion
Bowers, John A.	Kokomo	Howard
Bowers, Jesse W. (S)	Fort Wayne	Allen
Bowman, Charles M.	Albion	Noble
Bowman, Geo. W. (S)	Indianapolis	Marion
Bowser, Philip G.	Goshen	Elkhart
Boyd, Charles S.	East Chicago	Lake
Boyd, H. Clark	Terre Haute	Vigo
Boyd, Stella N.	Evansville	Vanderburgh
Boyer, Don W.	Lebanon	Boone
Boyer, Floyd A.	Indianapolis	Marion
Boyer, Grace B.	Marion	Grant
Boyle, Carroll L.	Poseyville	Posey
Boys, Frank F.	East Chicago	Lake
Boze, Robert L.	Berne	Adams
Bradley, Charles F.	New Smyrna Beach, Fla.	Lake
Bradley, Louis F.	Bluffton	Wells
Bradley, Richard V.	Kokomo	Howard
Bradley, Stephen C. (S)	Terre Haute	Vigo
Brady, John P.	Indianapolis	Marion
Brady, Samuel G.	Gary	Lake
Brady, Thomas A.	Indianapolis	Marion
Brakel, Frank J.	Evansville	Vanderburgh
Brandman, Harry	Gary	Lake
Brandt, William E.	Fort Wayne	Allen
Brauchla, Carl H. (S)	Anderson	Madison
Brauer, Abraham A.	East Chicago	Lake
Braun, Benjamin D.	Chicago, Ill.	Lake
Braunlin, Robert F.	Marion	Grant
Braunlin, Robert J.	Fort Wayne	Allen
Brayton, John R., Jr.	Oakland, Calif.	Marion
Brayton, John R.	Indianapolis	Marion
Brayton, Lee	Indianapolis	Marion
Brazelton, Osborne T. (S)	Seal Beach, Calif.	Gibson
Brechtl, Harvey J.	South Bend	St. Joseph
Breneman, William L.	San Antonio, Texas	Marion
Brennan, William C.	Whiting	Lake
Brenner, Howard B.	Munster	Lake
Bretz, John M.	Huntingburg	Dubois
Brickley, Harry D.	Indianapolis	Marion
Brickley, Richard A.	Indianapolis	Marion
Bridges, Alvin	Anderson	Madison
Bridges, William L.	Fort Wayne	Allen
Bridwell, Edgar	Bedford	Lawrence
Briggs, Robert W.	Indianapolis	Marion
Brillhart, James R.	Indianapolis	Marion
Brincko, John	Gary	Lake
Bringas, Irineo B.	Gary	Lake
Brink, Calvin C. (S)	Gary	Lake
Bristol, Henry M. S.	Terre Haute	Vigo
Britt, Robert	Evansville	Vanderburgh
Britton, Welbon D.	Montezuma	Parke-Vermillion
Brock, Earl E. (S)	Anderson	Madison
Brock, Joseph T.	New Castle	Henry
Brockman, Wilfred J.	Corydon	Harrison-Crawford
Brockmole, Arnold W.	Evansville	Vanderburgh
Brodie, Donald W.	Indianapolis	Marion
Bromley, Luman W.	Fort Wayne	Allen
Bronson, Paul J.	Terre Haute	Vigo
Brooks, Fred R., Jr.	Indianapolis	Marion
Brooks, G. Tanner	Richmond	Wayne-Union
Broomes, Edward L. C.	East Chicago	Lake
Brose, Paul E.	A. P. O., Seattle, Wash.	Marion
Broshears, Kenneth P.	Linton	Greene
Brosius, Robert H. W.	Fort Wayne	Allen
Brown, Archie E.	Indianapolis	Marion
Brown, David B.	Gary	Lake
Brown, David E.	Indianapolis	Marion
Brown, Dewitt W.	Indianapolis	Marion
Brown, Earl R., Jr.	Kokomo	Howard
Brown, Frances T.	Indianapolis	Marion
Brown, Frank M.	Indianapolis	Marion
Brown, Frederic W.	Fort Wayne	Allen
Brown, George E.	Greenwood	Johnson
Brown, George W.	Evansville	Vanderburgh
Brown, Gordon T.	Indianapolis	Marion
Brown, James C.	Valparaiso	Porter
Brown, James M.	Anderson	Madison
Brown, John S.	Carlisle	Sullivan
Brown, Kenneth H.	New Albany	Floyd
Brown, Leland G.	Muncie	Delaware-Blackford
Brown, Leo R.	Gary	Lake
Brown, Marcel S.	Spencer	Owen-Monroe
Brown, Richard J.	Richmond	Wayne-Union
Brown, Robert L.	Evansville	Vanderburgh
Brown, Robert M.	Marion	Grant
Brown, Robert R.	Terre Haute	Vigo
Brown, Stewart D.	Albany	Delaware-Blackford
Brown, Thomas C.	Honolulu, Hawaii	Marion
Brown, Thomas M.	Muncie	Delaware-Blackford
Brown, Wendell E.	Indianapolis	Marion
Browning, James S.	Indianapolis	Marion
Browning, William M.	Indianapolis	Marion
Brownley, Emma J.	Indianapolis	Marion
Brubaker, Harold S.	Huntington	Huntington
Brubeck, Robert E.	Martinsville	Morgan
Bruce, Reginald A.	Indianapolis	Marion
Brucker, Perry A.	Fort Wayne	Allen
Brueckman, F. Robert	Marion	Indianapolis
Bruegge, Theodore J.	Kokomo	Howard
Bruetsch, Walter L.	Indianapolis	Marion

Name	City	County
Bruner, Ralph W. (S)	Jeffersonville	Clark
Bryan, Franklin A.	Fort Wayne	Allen
Bryan, Robert E.	Kendallville	Noble
Bryan, Stanton L.	Evansville	Vanderburgh
Bryant, Edward G.	East Chicago	Lake
Buchanan, Wallace D.	South Bend	St. Joseph
Buche, Franklin P. (S)	Richmond	Wayne-Union
Buckingham, Richard E.	Bloomington	Owen-Monroe
Buckles, David L.	Anderson	Madison
Buchman, Marshall H.	New Albany	Floyd
Buckner, George D.	Fort Wayne	Allen
Buckner, Joy F.	Bluffton	Wells
Buechler, William F.	Elwood	Madison
Buechner, Frederick W.	South Bend	St. Joseph
Buehler, George M.	Jeffersonville	Clark
Buehner, Donald F.	Evansville	Vanderburgh
Buell, Forrest R.	Clay City	Clay
Bugh, Charles W.	Fairbanks, Alaska	Marion
Buhrmester, Harry C.	Lafayette	Tippecanoe
Bullard, Mattie J.	Gary	Lake
Bullers, Robert C.	Franklin	Johnson
Bullington, George E.	Whiteland	Johnson
Bunker, Ladoska Z.	North Manchester	Wabash
Burcham, James B.	Gary	Lake
Burdette, Harold F.	Indianapolis	Marion
Burger, Thomas C.	Evansville	Vanderburgh
Burghard, Rolla D.	Indianapolis	Marion
Burk, James M.	Decatur	Adams
Burket, Cecil R.	Bremen	Marshall
Burkhardt, Boyd A.	Tipton	Tipton
Burkhart, Charles A.	Fort Wayne	Allen
Burkle, John C. (S)	Lafayette	Tippecanoe
Burkle, Robert J.	Terre Haute	Vigo
Burks, Jess E.	Crawfordsville	Montgomery
Burnett, Arthur B.	New Castle	Henry
Burnett, Paul C.	Logansport	Cass
Burnikel, Ray H.	Evansville	Vanderburgh
Burns, John T.	Lafayette	Tippecanoe
Burns, Paul E.	Montpelier	Delaware-Blackford
Burress, Clyde R.	Evansville	Vanderburgh
Burris, Floyd L.	Michigan City	La Porte
Burtan, Rupert C.	Whiting	Lake
Burwell, Stanley W.	Muncie	Delaware-Blackford
Bush, Charles E.	Kirklin	Clinton
Bush, Edward R.	Anderson	Madison
Bush, Hargis R.	Cannelton	Perry
Bush, Jack A.	Lafayette	Tippecanoe
Buslee, Roger M.	South Bend	St. Joseph
Bussard, Clifford F. (S)	South Bend	St. Joseph
Bussard, Frank W.	South Bend	St. Joseph
Butler, Joe B.	Crothersville	Jackson-Jennings
Butler, John O.	Indianapolis	Marion
Butler, Robert M.	Indianapolis	Marion
Butterfield, Robert M.	Muncie	Delaware-Blackford
Butts, Milton A.	South Bend	St. Joseph
Butz, Ralph O.	Muncie	Delaware-Blackford
Byrd, Ryland P.	Jeffersonville	Clark
Byrn, Howard W. (S)	Oxford	Floyd
Byrne, Louis E.	Bloomington	Owen-Monroe
Byrne, Robert J.	Bicknell	Knox

C

Cacia, John J.	Evansville	Vanderburgh
Cagle, Bob R.	New Palestine	Hancock
Cahn, Hugo M.	Indianapolis	Marion
Cahn, Peter H.	Indianapolis	Marion
Cahué, Antonio R.	Gary	Lake
Cain, David R.	New Castle	Henry
CaJacob, Melville E.	Terre Haute	Vigo
Caldwell, Marilyn R.	Indianapolis	Marion
Caldwell, Milton V.	Terre Haute	Vigo
Call, Herbert F.	Indianapolis	Marion
Call, William H.	Ann Arbor, Mich.	Marion
Callaghan, Winship C.	Greensburg	Decatur
Calli, Louis	North Vernon	Jackson-Jennings
Calvert, Raymond R.	Lafayette	Tippecanoe
Calvin, Helen M.	North Liberty	St. Joseph
Calvin, O. Walter	North Liberty	St. Joseph
Cameron, Don F.	Angola	Steuben
Cameron, Mary H.	Angola	Steuben
Campagna, Ettor A.	East Chicago	Lake
Campbell, H. Edwin, Jr.	Indianapolis	Marion
Campbell, John A.	Indianapolis	Marion
Campbell, Patrick B.	Elkhart	Elkhart
Campbell, Robert L.	Indianapolis	Marion
Campbell, Sam W.	Noblesville	Hamilton
Campbell, William T.	Bedford	Lawrence
Canaday, James W. (S)	Indianapolis	Marion
Canganelli, Vincent G.	Lafayette	Tippecanoe
Cannon, Daniel H.	New Albany	Floyd
Cantwell, Edgar R.	Indianapolis	Marion
Caplin, Irvin	Indianapolis	Marion
Caplin, Samuel S.	Indianapolis	Marion
Carberry, George A.	Gary	Lake
Carbone, Joseph A.	Gary	Lake
Carey, J. Albert	Gary	Lake
Carlberg, Dale K.	Jeffersonville	Clark
Carlo, Ernest R. (S)	Fort Wayne	Allen
Carlson, Edward A. (S)	Peru	Miami
Carlson, Milton R.	Oceanside, Calif.	Lake
Carlson, Norman R.	Michigan City	La Porte
Carlson, Ralph F.	Evansville	Vanderburgh
Carlyle, Ivan E. (S)	Michigantown	Clinton
Carmody, Raymond F.	Gary	Lake
Carneal, Thomas E. (S)	Winamac	Pulaski
Carney, Joel T. (S)	Jeffersonville	Clark
Carpenter, Bennie F.	Griffith	Lake
Carpenter, James B.	Lafayette	Tippecanoe
Carpenter, Ramesh S.	Garrett	DeKalb
Carpentier, Harry F.	Princeton	Gibson
Carpentier, James R.	La Porte	La Porte
Carr, Joseph H.	Henryville	Clark
Carrel, Francis E.	Frankfort	Clinton
Carroll, Bertha Rose	W. Lafayette	Tippecanoe
Carroll, John C.	Decatur	Adams
Carroll, Mary D.	Crown Point	Lake
Carson, Wayne	Indianapolis	Marion
Carter, Eunice M.	Noblesville	Hamilton
Carter, F. R. N. (S)	South Bend	St. Joseph
Carter, Fred S.	La Porte	La Porte
Carter, James E.	Indianapolis	Marion
Carter, Jean V.	Tipton	Tipton
Carter, John O.	Hobart	Lake
Carter, Oren E.	Indianapolis	Marion
Carter, Robert E., Jr.	Noblesville	Hamilton
Carter, William D.	Walkerton	La Porte
Cartwright, Emor L. (S)	Fort Wayne	Allen
Cartwright, Jack D.	La Porte	La Porte
Carty, Charles B.	Pekin	Washington
Casey, Stanley M.	Huntington	Huntington
Cassady, James V.	South Bend	St. Joseph
Cassady, John R.	South Bend	St. Joseph
Cast, William R.	Indianapolis	Marion
Castetter, Gregory K.	Anderson	Madison
Castro, Ignacio B.	Scottsburg	Scott
Cattell, Lee M.	Kokomo	Howard
Cavins, Alexander W.	Terre Haute	Vigo
Caylor, Charles H.	Bluffton	Wells
Caylor, Harold D.	Bluffton	Wells
Caylor, Truman E.	Bluffton	Wells
Chael, Thomas C.	Munster	Lake

Name	City	County
Challman, William B.	Mt. Vernon	Posey
Chambers, Alan R.	Fort Wayne	Allen
Chambers, Carol R.	Union City	Randolph
Chambers, Leroy B.	Union City	Randolph
Chambers, Pauline D.	Greenwood	Johnson
Chandler, Leon H.	Goshen	Elkhart
Chappel, Alfred T.	Franklin	Johnson
Chase, James A.	Fort Wayne	Allen
Chase, Thomas P.	Avon	Hendricks
Chattin, Herbert O.	Vincennes	Knox
Chattin, Robert E.	Loogootee	Daviess-Martin
Chattin, William R.	Indianapolis	Marion
Chattin, Vance J.	Washington	Daviess-Martin
Chen, Ko K.	Indianapolis	Marion
Cheng, Sylvia F.	Logansport	Cass
Cheydleur, Eleanor P.	Evansville	Vanderburgh
Chernish, Stanley M.	Indianapolis	Marion
Chevalier, Robert B.	Indianapolis	Marion
Childress, Richard H.	Indianapolis	Marion
Childs, Wallace E.	Madison	Jefferson-Switzerland
Chivington, Paul V.	Indianapolis	Marion
Choslovsky, Sydney	Gary	Lake
Christie, Marvin	Beech Grove	Marion
Christophel, Verna A.	Mishawaka	St. Joseph
Chroniak, Walter	Indianapolis	Marion
Chu, Johnson C. S.	Logansport	Cass
Chube, David D.	Gary	Lake
Church, Robert A.	Hammond	Lake
Clark, George A.	Indianapolis	Marion
Clark, Ivan A.	Paoli	Orange
Clark, Jack P.	Syracuse	Elkhart
Clark, Joseph H.	Huntington	Huntington
Clark, Lawson J.	Indianapolis	Marion
Clark, Marion E.	Cambridge City	Henry
Clark, Robert M.	Muncie	Delaware-Blackford
Clark, Thomas W.	Evansville	Vanderburgh
Clark, William B., Jr.	Jeffersonville	Clark
Clark, William H.	South Bend	St. Joseph
Clark, William R.	Fort Wayne	Allen
Clarke, Elton R.	Kokomo	Howard
Clarkson, Clarence G.	Liberty	Wayne-Union
Classen, Pete R. C.	Elkhart	Elkhart
Clay, Eleanor	Columbus	Bartholomew-Brown
Claybourn, Norman L.	Hammond	Lake
Cleveland, John B.	Michigan City	La Porte
Clevenger, Joseph H.	Muncie	Delaware-Blackford
Clevinger, William G.	Indianapolis	Marion
Cline, Kenneth L.	Wyatt	St. Joseph
Close, Gerald A.	S. Rhodesia, Africa	Marion
Close, W. Donald	Indianapolis	Marion
Clouse, Paul A.	Evansville	Vanderburgh
Clunie, William A.	Huntington	Huntington
Coade, George E.	Long Beach, Calif.	Marion
Coates, Jacqueline	Indianapolis	Marion
Cobb, Clarence M.	Logansport	Cass
Coble, Frank H.	Richmond	Wayne-Union
Cochran, Harry A., Jr.	Fort Wayne	Allen
Cochran, John F.	Bloomington	Owen-Monroe
Cochran, Robert B.	Muncie	Delaware-Blackford
Cockrum, William M.	Evansville	Vanderburgh
Coddens, Avery L.	Earl Park	Benton
Coddington, Robert C.	Ft. Campbell, Ky.	Marion
Coffel, Melvin H.	Vincennes	Knox
Coggeshall, Warren E.	Indianapolis	Marion
Cohen, Hyman	Gary	Lake
Cohen, Irving	Plainfield	Hendricks
Cohn, Alvin F.	Indianapolis	Marion
Colbert, Ruth E. D.	Indianapolis	Marion
Cole, Ira	Lafayette	Tippecanoe
Coleman, Floyd B.	Waterloo	DeKalb
Coleman, Henry G.	Salem	Washington
Coleman, Joseph E.	Evansville	Vanderburgh
Colip, George D.	South Bend	St. Joseph
Collins, Hubert L.	Indianapolis	Marion
Collins, Jack T.	Bluffton	Wells
Collins, Margaret C.	Muncie	Delaware-Blackford
Collins, Robert C.	Indianapolis	Marion
Colosey, Frederick J.	South Bend	St. Joseph
Colvin, Robert C.	Newburgh	Warrick
Combs, Herman T.	Evansville	Vanderburgh
Combs, John H.	Evansville	Vanderburgh
Combs, Pearl B. (S)	Evansville	Vanderburgh
Combs, Stuart R.	Terre Haute	Vigo
Comeau, William J.	Marion	Grant
Comer, Kenneth E.	Mooresville	Morgan
Compton, George L.	Tipton	Tipton
Compton, Walter A.	Elkhart	Elkhart
Congleton, G. C. (S)	Terre Haute	Vigo
Conklin, James O.	Terre Haute	Vigo
Conklin, Raymond L.	Elkhart	Elkhart
Conley, John E.	Fort Wayne	Allen
Conley, Joseph L. (S)	Indianapolis	Marion
Conley, Thomas M.	Kokomo	Howard
Connell, Vactor O.	Bourbon	Marshall
Connelly, Richard D.	Fort Wayne	Allen
Connerley, Marion L.	Terre Haute	Vigo
Connoy, Andrew F.	Westfield	Hamilton
Connoy, Leo F.	Westfield	Hamilton
Conrad, Henry W.	Lawrenceburg	Dearborn-Ohio
Constan, Evan	Westville	La Porte
Conway, Chester C.	Indianapolis	Marion
Conway, Glenn	Indianapolis	Marion
Conway, Thomas J.	Terre Haute	Vigo
Cook, Charles E.	North Manchester	Wabash
Cook, Gordon C.	South Bend	St. Joseph
Cook, Robert G.	Bluffton	Wells
Cooney, Charles J.	Fort Wayne	Allen
Coons, John D.	Lebanon	Boone
Coons, Ritchie	Lebanon	Boone
Cooper, B. Trent	Roanoke	Huntington
Cooper, Harry L. (S)	South Bend	St. Joseph
Cooper, John	Muncie	Delaware-Blackford
Cooper, Leo K.	Gary	Lake
Cooper, Waller W.	Evansville	Vanderburgh
Cope, Stanton E.	Huntington	Huntington
Corcoran, Patrick J. V.	Evansville	Vanderburgh
Cormican, Herbert L.	Elkhart	Elkhart
Cornacchione, Matthew	Indianapolis	Marion
Cornell, Robert A.	Crawfordsville	Montgomery
Corpe, Kenneth F.	Rushville	Rush
Corrao, Gaetano	Gary	Lake
Corrao, Thomas J.	Jeffersonville	Clark
Corsentino, Bart E.	Vincennes	Knox
Cortese, James V.	Indianapolis	Marion
Cortese, Thomas A.	Indianapolis	Marion
Costello, Albert J.	Hammond	Lake
Costin, Robert L.	Indianapolis	Marion
Cotter, Edward R.	Hammond	Lake
Cottrell, Robert F.	Fort Wayne	Allen
Coughenour, J. Robert	Indianapolis	Marion
Countryman, Frank W.	Indianapolis	Marion
Coursey, James O.	Plymouth	Marshall
Covalt, Wendell E.	Muncie	Delaware-Blackford

Name	City	County
Covell, Harry M.	Auburn	DeKalb
Covey, Thomas J.	Valparaiso	Porter
Cox, Leon T.	Richmond	Wayne-Union
Coyner, Alfred B. (S)	Lafayette	Tippecanoe
Craft, Kenneth L. (S)	Indianapolis	Marion
Craig, Alexander F.	New Castle	Henry
Craig, Harry L.	Huntingburg	Dubois
Craig, Reuben	Kokomo	Howard
Craig, Reuben A.	Kokomo	Howard
Craig, Richard M.	Fort Wayne	Allen
Craig, Robert A.	Syracuse	Elkhart
Crain, James W.	Williamsport	Fountain-Warren
Crampton, Chas. C. (S)	Delphi	Carroll
Crates, Gordon C.	Muncie	Delaware-Blackford
Crawford, James H.	Evansville	Vanderburgh
Crawford, John A.	Indianapolis	Marion
Crawford, Theodore R.	Kokomo	Howard
Creek, Jean A.	Bloomington	Owen-Monroe
Cregger, Irby E.	Orlando AFB, Florida	Marion
Crevello, Albert J.	Evansville	Vanderburgh
Crimm, Paul D.	Evansville	Vanderburgh
Cripe, Earl P.	Bremen	Marshall
Cripe, William	Portland	Jay
Crise, John R.	Portage	Porter
Crist, John R.	Mt. Vernon	Posey
Christee, James W.	San Francisco, Calif.	Vigo
Crockett, Franklin S. (H)	West Lafayette	Tippecanoe
Crockett, Wayne A.	Terre Haute	Vigo
Cron, William J.	Warsaw	Kosciusko
Cross, David G.	Indianapolis	Marion
Crowder, James H.	Sullivan	Sullivan
Crudden, Charles H.	Evansville	Vanderburgh
Crum, Marion M.	Angola	Steuben
Cuello, Jose E.	Gary	Lake
Cuff, Steve C.	Evansville	Vanderburgh
Culbertson, Carl S.	South Bend	St. Joseph
Culbertson, Clyde G.	Indianapolis	Marion
Cullen, Paul K., Sr.	Indianapolis	Marion
Cullen, Paul K., Jr.	Rochester, Minn.	Marion
Cullison, John L.	Muncie	Delaware-Blackford
Cullnane, Chris W.	Evansville	Vanderburgh
Culloden, William G.	Indianapolis	Marion
Culp, John E.	Fort Wayne	Allen
Cunningham, Gene C.	Indianapolis	Marion
Cunningham, Robert D.	Marion	Grant
Cure, Charles W.	Indianapolis	Marion
Cure, Elmer T.	Muncie	Delaware-Blackford
Currie, Robert W.	Indianapolis	Marion
Curry, R. Louis	Indianapolis	Marion
Curtner, Myron L. (S)	Vincennes	Knox
Custer, Edward W.	South Bend	St. Joseph
Cuthbert, Marvin P.	Indianapolis	Marion
Cymbala, Bohdan	Evansville	Vanderburgh
Czenkusch, Helen G.	Indianapolis	Marion

D

Daggy, Benjamin T.	Richmond	Wayne-Union
Daggy, James R.	Richmond	Wayne-Union
Dahling, Clemens W.	New Haven	Allen
Dahling, Fred W.	New Haven	Allen
Dainko, Alfred J.	East Chicago	Lake
Dale, Maxwell H.	Connersville	Fayette-Franklin
Dale, Robert T.	Indianapolis	Marion
Daley, Edward H.	Indianapolis	Marion
Dallas, Fred R.	Indianapolis	Marion
Dallas, Mary E.	Indianapolis	Marion
Dalton, Naomi L.	Danville	Hendricks
Dalton, William W.	Indianapolis	Marion
Dalton, Wilson L.	Shelbyville	Shelby
Daly, Joseph M.	Indianapolis	Marion
Daniel, John C. (S)	Indianapolis	Marion
Daniel, Robert A.	Gary	Lake
Daniels, George R. (S)	Marion	Grant
Dannacher, William D.	Wabash	Wabash
Dare, Lee A.	Jeffersonville	Clark
Darling, Dorothy R.	Gary	Lake
Das, Amal K.	New Castle	Henry
Dasaro, George E.	Gary	Lake
Datzman, Basil J.	La Porte	La Porte
Datzman, Richard C.	Fort Wayne	Allen
Daugherty, Forest D.	Columbus	Bartholomew-Brown
Daugherty, Fred N.	Crawfordsville	Montgomery
Daugherty, William L.	Hutsonville, Ill.	Sullivan
Daves, W. Lawrence	Evansville	Vanderburgh
David, George J.	Muncie	Delaware-Blackford
Davidoff, Manuel A.	Fort Wayne	Allen
Davidson, Dale A.	Indianapolis	Marion
Davidson, Harold H.	Evansville	Vanderburgh
Davidson, N. Cort	Indianapolis	Marion
Davis, Bennie L.	Indianapolis	Marion
Davis, Carl M.	Valparaiso	Porter
Davis, Claude E.	Angola	Steuben
Davis, Edgar C. (S)	Muncie	Delaware-Blackford
Davis, Edward A.	South Bend	St. Joseph
Davis, F. Sterling	Indianapolis	Marion
Davis, Grayson B.	Lafayette	Tippecanoe
Davis, Howard B.	Lafayette	Tippecanoe
Davis, John A.	Flat Rock	Shelby
Davis, John C. (S)	Logansport	Cass
Davis, Joseph B.	Marion	Grant
Davis, Lloyd H. (S)	Madison	Jefferson-Switzerland
Davis, Margaret M.	Indianapolis	Marion
Davis, Marvin R.	Columbus	Bartholomew-Brown
Davis, Max D.	Evansville	Vanderburgh
Davis, Merrill S. (S)	Marion	Grant
Davis, Neal	Gary	Lake
Davis, Paul E.	Terre Haute	Vigo
Davis, Richard M.	Marion	Grant
Davis, Sam J.	Indianapolis	Marion
Davis, Thomas N. III	Hammond	Lake
Davis, William H.	New Market	Montgomery
Day, William D. C.	Seymour	Jackson-Jennings
Deal, Eleanor H.	Speedway City	Marion
Dean, Donald I.	Rushville	Rush
Dearmin, Robert M.	Indianapolis	Marion
DeArmond, Murray	Indianapolis	Marion
De Bois, Elon	Gary	Lake
DeBrota, John Jr.	Indianapolis	Marion
Deems, Myers B.	Evansville	Vanderburgh
Deever, John W.	Indianapolis	Marion
DeFries, John J.	New Paris	Elkhart
DeGrazia, Eugene J.	Valparaiso	Porter
Deitch, Robert D.	Indianapolis	Marion
DeMotte, C. Bowen	Greenwood	Marion
DeNaut, James F.	Knox	Starke
Denham, Robert H.	South Bend	St. Joseph
Dennison, Alfred D., Jr.	Indianapolis	Marion
Denny, E. Rankin	Terre Haute	Vigo
Denny, Forrest L.	Indianapolis	Marion
Denny, James W.	Indianapolis	Marion
Denny, Melvin H.	Rushville	Rush
Denton, Larkin D.	Greentown	Howard
Denzer, Edward K.	Evansville	Vanderburgh
Denzer, William O.	Evansville	Vanderburgh
Deppe, Charles F.	Franklin	Johnson
Derhammer, George L.	Brookston	Tippecanoe

Name	City	County
Dester, Herbert E.	Greencastle	Putnam
DeTar, George B. (S)	Winslow	Pike
Dettloff, Frederick R.	Greencastle	Putnam
Deur, Julius J.	Lafayette	Tippecanoe
Deutsch, William	Muncie	Delaware-Blackford
DeVoe, Kenneth R.	South Bend	St. Joseph
DeWees, Dwight L.	Indianapolis	Marion
DeWester, Gerald M.	Indianapolis	Marion
Dian, August J.	Gary	Lake
Dickerson, W. Martin	Monticello	White
Dickson, Carolyn L.	Indianapolis	Marion
Dickson, Dale D.	Greensburg	Decatur
Dieckman, Herbert S.	Evansville	Vanderburgh
Dielman, Franklin C. (S)	Fulton	Fulton
Dierdorf, Fred W.	Terre Haute	Vigo
Dierolf, Edward J.	Gary	Lake
Dieter, William J.	Westville	La Porte
Dietl, Ernest L.	South Bend	St. Joseph
Dietz, David J.	Muncie	Delaware-Blackford
Dill, Charles W.	Beech Grove	Marion
Dill, Myron K.	Indianapolis	Marion
Dillman, Carl E.	Corydon	Harrison-Crawford
Dilts, Robert L.	Indianapolis	Marion
Dimitroff, Lambro	Calumet City, Ill.	Lake
Dimmett, James D.	Boonville	Warrick
Dingle, Paul E.	Richmond	Wayne-Union
Dingley, Albert F.	South Bend	St. Joseph
Dininger, William S.	Winchester	Randolph
Dintaman, Paul G.	Indianapolis	Marion
Dirks, Kenneth R.	A.P.O. 180, New York, N. Y.	Marion
Dittmer, Jack E.	Valparaiso	Porter
Dittmer, Thomas L.	Valparaiso	Porter
Ditton, Irvin W. (S)	Fort Wayne	Allen
Dixon, Rex W.	Anderson	Madison
Dodd, Robert D.	South Bend	St. Joseph
Dodd, Roberts K.	Evansville	Vanderburgh
Dodds, James U.	Hartford City	Delaware-Blackford
Dodds, Wemple	Crawfordsville	Montgomery
Doenges, James L.	Anderson	Madison
Doermann, Paul E.	Huntington	Huntington
Doherty, Raymond J.	Crown Point	Lake
Dolan, Patrick A.	Indianapolis	Marion
Doles, Ted S.	Muncie	Delaware-Blackford
Dolezal, Bernard J.	South Bend	St. Joseph
Donahue, Claude M.	Carmel	Hamilton
Donahue, Francis E.	Dublin	Henry
Donahue, George R.	Lafayette	Tippecanoe
Donahue, James M.	APO 851, New York, N. Y.	Marion
Donaldson, Frank C.	Anderson	Madison
Donaldson, Miles W.	Marion	Grant
Donato, Albert M.	Indianapolis	Marion
Donchess, Joseph C.	Gary	Lake
Doneff, Ronald H.	Hobart	Lake
Donnally, George A.	Portland	Jay
Donnelly, Everett F.	South Bend	St. Joseph
Doran, J. Hal	Indianapolis	Marion
Dormire, Robert D.	Warsaw	Koscuisko
Dorrance, Thomas O.	Bluffton	Wells
Dosado, Elpidio B.	Gary	Lake
Doss, Jerome F.	Indianapolis	Marion
Doty, James R., Jr.	Indianapolis	Marion
Doughty, Samuel R., Jr.	Indianapolis	Marion
Douglas, William T.	Indianapolis	Marion
Dovey, Edward G.	Elkhart	Elkhart
Dowd, Joseph A.	Indianapolis	Marion
Dowell, Emil H.	Rockville	Parke-Vermillion
Downer, Luther H.	Wabash	Wabash
Dragoo, John R.	Evansville	Vanderburgh
Drake, Dale W.	Evansville	Vanderburgh
Drake, Ellery T.	Martinsville	Morgan
Drake, James R.	Anderson	Madison
Drake, John C.	Anderson	Madison
Drake, Marion C.	Elwood	Madison
Drennen, Robert V.	Anderson	Madison
Drew, Arthur L., Jr.	Indianapolis	Marion
Dreyer, Ralph W.	Richmond	Wayne-Union
Drummy, William W.	Terre Haute	Vigo
Dryden, Gale E.	Indianapolis	Marion
Dublin, Madeline P.	Francesville	Tippecanoe
DuBois, Charles C. (S)	Warsaw	Kosciusko
DuBois, Ramon B.	Lafayette	Tippecanoe
Dudgeon, Charles A.	Hartford City	Delaware-Blackford
Duemling, Arnold H.	Fort Wayne	Allen
Dugan, Thomas	Columbus	Bartholomew-Brown
Dukes, Betty	Dugger	Sullivan
Dukes, David A.	Tell City	Perry
Dukes, David J.	Corydon	Harrison-Crawford
Dukes, Frederic M. (S)	Dugger	Sullivan
Dukes, Joe E.	Dugger	Sullivan
Dulin, Basil B.	Anderson	Madison
Dunbar, Fred E.	Marion	Grant
Duncan, John S.	Gary	Lake
Duncan, Raymond	Bedford	Lawrence
Duncan, Stuart J.	Indianapolis	Marion
Duncan, William A.	Indianapolis	Marion
Dunham, Henry H.	Wabash	Wabash
Dunkin, Ramon S.	Indianapolis	Marion
Dunlap, D. Logan	South Bend	St. Joseph
Dunning, Thomas W.	Muncie	Delaware-Blackford
Dunstone, Harry C.	Fort Wayne	Allen
Dupes, Lowell E.	Indianapolis	Marion
Dupler, Lee F. W.	Frankfort	Marion
Durham, Lowell J.	La Porte	La Porte
Durkee, Melvin S.	Evansville	Vanderburgh
Durkin, John W., Jr.	Evansville	Vanderburgh
Dusard, Joseph C.	Bedford	Lawrence
DuSold, Donald D.	Crown Point	Lake
Dutchess, C. Toney	Galveston	Cass
Dutchman, William R.	Evansville	Vanderburgh
Dyar, Edwin W.	Indianapolis	Marion
Dycus, Walter A.	Evansville	Vanderburgh
Dye, William E.	Oakland City	Gibson
Dyer, George W.	Terre Haute	Vigo
Dyer, Wallace K.	Evansville	Vanderburgh
Dyke, Richard W.	Indianapolis	Marion
Dyken, Mark L.	Indianapolis	Marion
Dyken, Paul R.	Indianapolis	Marion
Dykhuizen, Theodore A.	Frankfort	Clinton
Dzenitis, Andrievs J.	Indianapolis	Marion
Dziabis, Marvin D.	Indianapolis	Marion

E

Eades, R. Charles	South Bend	St. Joseph
Eades, Ralph C.	Valparaiso	Porter
Earl, Max M.	Kokomo	Howard
Earp, Evanson B.	Indianapolis	Marion
Easter, James N.	New Castle	Henry
Eastman, Joseph R., Jr.	Indianapolis	Marion
Eaton, Edwin R.	Indianapolis	Marion
Eaton, Lyman D.	Indianapolis	Marion
Eaton, Marion J.	Lafayette	Tippecanoe
Ebbinghouse, Tom	Richmond	Wayne-Union
Ebert, J. Wayne	Indianapolis	Marion
Eberwein, John H. (S)	Indianapolis	Marion
Ebin, Judah L.	Evansville	St. Joseph
Eby, Ida L. (S)	Warren	Huntington
Echeverria, Rodolfo E.	Elkhart	Elkhart

Name	City	County
Echsner, Herman J.	Columbus	Bartholomew-Brown
Eckberg, Theodore J.	Memphis, Tenn.	Marion
Eckert, Russell A.	Logansport	Cass
Echt, Charles R.	Indianapolis	Marion
Edmonds, Kendrick	Bedford	Lawrence
Edwards, Bernard E.	South Bend	St. Joseph
Edwards, Edward T.	Vincennes	Knox
Edwards, Henry G.	Terre Haute	Vigo
Edwards, William F.	New Albany	Floyd
Egan, Sherman L.	South Bend	St. Joseph
Egan, Robert L.	Indianapolis	Marion
Egbert, Herbert L.	Indianapolis	Marion
Egger, Ross L.	Muncie	Delaware-Blackford
Eggers, Ernest L. (S)	Hammond	Lake
Eggers, Henry W.	Hammond	Lake
Eggers, Richard	Crawfordsville	Montgomery
Egnatz, Charles D.	Munster	Lake
Egnatz, Nicholas	Hammond	Lake
Egolf, Charles F.	Bloomington	Owen-Monroe
Ehrich, William S. (S)	Manning, S. Carolina	Vanderburgh
Eicher, Palmer O.	Indianapolis	Marion
Eikenberry, Hugh W.	Indianapolis	Marion
Eiler, Paul A.	North Manchester	Wabash
Eisaman, Jack L.	Bluffton	Wells
Eisenberg, David A.	Martinsville	Morgan
Eisterhold, John A.	Evansville	Vanderburgh
Eldridge, Gail E.	Indianapolis	Marion
Elkins, James P.	Indianapolis	Marion
Elledge, Ray	Hammond	Lake
Elleman, John H.	Kokomo	Howard
Ellett, John, Jr.	Coatesville	Putnam
Elliott, John C. (S)	Guilford	Dearborn-Ohio
Elliott, Paul W.	Lafayette	Tippecanoe
Elliott, Ralph A.	Gary	Lake
Elliott, Thomas A.	Elkhart	Elkhart
Ellis, Davis W.	Rushville	Rush
Ellis, Forrest D.	North Vernon	Jackson-Jennings
Ellis, George M.	Connersville	Fayette-Franklin
Ellis, Lyman H.	Lizton	Hendricks
Ellis, Seth W.	Anderson	Madison
Ellis, William N.	Indianapolis	Marion
Elshout, Clem H.	La Porte	La Porte
Elsten, Aubrey W.	Anderson	Madison
Elston, Lynn W.	Fort Wayne	Allen
Elston, Ralph W.	Fort Wayne	Allen
Elward, Carl J.	Wabash	Wabash
Ely, Cecil W.	Jeffersonville	Clark
Emenhiser, Donald C.	New Haven	Allen
Emenhiser, John L.	Fort Wayne	Allen
Emery, Charles B.	Bedford	Lawrence
Emery, Charles B., Jr.	Bloomington	Owen-Monroe
Emhardt, John T.	Indianapolis	Marion
Emhardt, John W. A. (S)	Indianapolis	Marion
Emme, Richard W.	Harlan	Allen
Endicott, Wayne H.	Greenfield	Hancock
Engel, Edgar L.	Evansville	Vanderburgh
Engel, Howard R.	South Bend	St. Joseph
Engeler, James E.	Lafayette	Tippecanoe
Engle, Russell B.	Winchester	Randolph
Engleman, Reinhold	Fort Wayne	Allen
English, Hubert M.	Gary	Lake
English, John P.	South Bend	St. Joseph
Entner, Charles L.	Dunkirk	Jay
Episcopo, Arsenius R.	Salem	Washington
Erdel, Milton W.	Frankfort	Clinton
Erehart, Mark G. (S)	Huntington	Huntington
Ericksen, Lester G.	South Bend	St. Joseph
Erickson, Gustaf W.	South Bend	St. Joseph
Ericson, Harold L.	Windfall	Tipton
Ericson, Homer S.	Kokomo	Howard
Erwin, W. Robert	La Porte	La Porte
Eshelman, Henry R.	Monterey	Pulaski
Eskew, Kenneth W.	Sullivan	Sullivan
Espino, Jose C.	Munster	Lake
Espy, Theodore R.	Gary	Lake
Estes, Ambrose C.	Bloomington	Owen-Monroe
Eugenides, Tatiana	Highland	Lake
Evans, Daniel R.	Indianapolis	Marion
Evans, Frederick H.	Indianapolis	Marion
Evans, Frederick J.	Clinton	Parke-Vermillion
Evans, Paul V.	Indianapolis	Marion
Everly, Ralph V.	Indianapolis	Marion
Eviston, John B.	Huntington	Huntington
Ewer, Robert W.	Evansville	Vanderburgh
Ewing, Nathaniel D.	Vincennes	Knox

F

Fadell, Matthew J.	Gary	Lake
Fadul, Armand	Gary	Lake
Fagaly, William J.	Lawrenceburg	Dearborn-Ohio
Failey, Robert B.	Indianapolis	Marion
Faith, Ira L.	Evansville	Vanderburgh
Fargher, Francis M.	Michigan City	La Porte
Fargher, Robert A.	La Porte	La Porte
Farid, Rahim S.	Brazil	Clay
Farner, James E.	Mishawaka	St. Joseph
Farnsworth, Samuel A.	La Porte	La Porte
Farquhar, John S., Jr.	Fort Wayne	Allen
Farr, James C.	Bloomington	Owen-Monroe
Farrell, John J., Jr.	Greenfield	Hancock
Farrell, Joseph T.	Indianapolis	Marion
Farris, John J.	Washington	Daviess-Martin
Faul, Henry J.	Evansville	Vanderburgh
Faulkner, Donald J.	Hobart	Lake
Fausset, C. Basil	Indianapolis	Marion
Faust, Howard M. Jr.	Anderson	Madison
Faw, Melvin L.	Evansville	Vanderburgh
Fedor, Thomas A.	East Chicago	Lake
Feferman, Martin E.	South Bend	St. Joseph
Feinberg, Irwin I.	Whiting	Lake
Feinn, Harry S.	La Porte	La Porte
Feldman, Max	South Bend	St. Joseph
Feldner, Ronald P.	Calumet City, Ill.	Lake
Fell, Robert M.	Rosedale	Parke-Vermillion
Fenneman, Robert J.	Evansville	Vanderburgh
Ferguson, Arthur N.	Fort Wayne	Allen
Ferguson, Donald H.	Anderson	Madison
Ferguson, William B.	Lafayette	Tippecanoe
Ferrara, Donald W.	Peru	Miami
Ferrara, Joseph F.	Franklin	Johnson
Ferrara, Samuel J.	Peru	Miami
Ferrell, Mars B.	Fortville	Madison
Ferry, Francis A.	Indianapolis	Marion
Ferry, John L.	Whiting	Lake
Ferry, Paul W.	Kokomo	Howard
Fessler, Gordon S.	Rising Sun	Dearborn-Ohio
Fetrow, Kenneth O.	Munster	Lake
Fichman, Abraham M.	Fort Wayne	Allen
Fickas, Dallas	Evansville	Vanderburgh
Fiederlein, Frederick J.	Muncie	Delaware-Blackford
Fields, Donald C.	Lafayette	Tippecanoe
Fields, Donald L.	Kokomo	Howard
Filipek, Walter J.	South Bend	St. Joseph
Finfrock, James D.	Elkhart	Elkhart
Finneran, Joseph C.	Indianapolis	Marion
Fipp, August L.	Rome City	Noble
Firestein, Ben Z.	South Bend	St. Joseph
Firestein, Ray	South Bend	St. Joseph
Fisch, Charles	Indianapolis	Marion
Fischer, A. Alan	Indianapolis	Marion
Fischer, Burnell	Hammond	Lake

Name	City	County
Fischer, Carlton N.	La Porte	La Porte
Fischer, Warren E.	Anderson	Madison
Fish, Clyde M. (S)	Edwardsburg, Mich.	St. Joseph
Fish, Edson C.	South Bend	St. Joseph
Fisher, Frank C.	Buffalo, N. Y.	Marion
Fisher, Gerald E.	Ippy, French Equatorial Africa	Marion
Fisher, Henry	Marion	Grant
Fisher, John E.	Attica	Fountain-Warren
Fisher, John E.	Newcastle	Henry
Fisher, Lawrence F. (S)	South Bend	St. Joseph
Fisher, Walter S.	Columbus	Bartholomew-Brown
Fisher, William C.	Evansville	Vanderburgh
Fitzgerald, Brice E.	Logansport	Cass
Fitzgerald, William J.	Indianapolis	Marion
Fitzpatrick, H. W. (S)	Elwood	Madison
Fitzpatrick, James S.	Portland	Jay
Fitzpatrick, William J.	Hammond	Lake
Flack, Russell A.	Lafayette	Tippecanoe
Flaherty, Robert A.	Fort Wayne	Allen
Flanagan, Estle P. (S)	Walton	Cass
Flanagan, Paul M.	Indianapolis	Marion
Flanders, Robert	Indianapolis	Marion
Flanigan, Meredith B.	Indianapolis	Marion
Flannigan, Harley F.	LaGrange	LaGrange
Fleetwood, Raymond A.	Indianapolis	Marion
Fleischer, Jacob C.	East Chicago	Lake
Fleischl, Herbert	Indianapolis	Marion
Fleming, Claude F. (S)	Elkhart	Elkhart
Flick, John J.	Indianapolis	Marion
Flora, Fred W.	Frankfort	Clinton
Flora, Joseph O.	Indianapolis	Marion
Fogel, Ernest	Logansport	Cass
Folck, John K.	Princeton	Gibson
Foley, Hansel O.	South Bend	St. Joseph
Folkening, Norval C.	Indianapolis	Marion
Foltz, Lloyd E.	Brownsburg	Hendricks
Fong, Theodore C. C.	Madison	Jefferson-Switzerland
Forbes, Robert S.	Indianapolis	Marion
Forbes, Violet Crabbe	Wolcott	White
Foreman, Walter A.	Brookville	Fayette-Franklin
Forrest, O. Norman, Jr.	South Bend	St. Joseph
Forry, Frank (S)	Indianapolis	Marion
Forsee, Norman E.	Jeffersonville	Clark
Fortuna, Frank W.	Indianapolis	Marion
Fosbrink, Ephriam L.	Syracuse	Elkhart
Fosgate, Harold	Indianapolis	Marion
Foster, Lee N.	Indianapolis	Marion
Foster, Ray D.	Indianapolis	Marion
Foster, Ray T.	Newcastle	Henry
Foster, Robert H. K.	Franklin	Johnson
Fountaine, Thomas J.	Bedford	Lawrence
Fouts, Paul J.	Indianapolis	Marion
Fowler, Richard R.	Bloomington	Owen-Monroe
Fox, C. Philip	Washington	Daviess-Martin
Fox, Jack	Munster	Lake
Fox, R. F.	Lafayette	Tippecanoe
Frable, Frank L. Jr.	Lawrenceburg	Dearborn-Ohio
Frahm, Charles	East Chicago	Lake
Fralich, Joseph C.	Milwaukee, Wis.	Marion
France, Lloyd C.	Plymouth	Marshall
Frank, Herbert	South Bend	St. Joseph
Frank, John R. (S)	Valparaiso	Porter
Frank, Lyall, Jr.	South Bend	St. Joseph
Frank, Lyall L.	South Bend	St. Joseph
Franke, Gordon R.	Fort Wayne	Allen
Frankhouser, Charles M. A.	Fort Wayne	Allen
Franklin, Philip L.	Gary	Lake
Franklin, William L.	Indianapolis	Marion
Frankowski, Clementine	Whiting	Lake
Frantz, Mount E.	Bryan A.F.B., Texas	Hendricks
Frasch, Mahlon G.	Lafayette	Tippecanoe
Frash, DeVon W. Jr.	South Bend	St. Joseph
Frash, De Von W.	South Bend	St. Joseph
Frazier, John L.	Kokomo	Howard
Freeborn, Warren S., Jr.	Oaklandon	Hancock
Freeby, C. William	Decatur	Adams
Freed, Carl A.	Indianapolis	Marion
Freed, John E., Jr.	Terre Haute	Vigo
Freeland, Bill E.	Batesville	Ripley
Freeman, Leslie W.	Indianapolis	Marion
Freeman, Max E.	Indianapolis	Marion
French, Richard N.	Lackland A.F.B., Texas	Marion
Fretz, Richard C.	Kokomo	Howard
Frey, Harley B.	Lafayette	Tippecanoe
Frey, William B.	South Bend	St. Joseph
Friedman, Isadore E.	Hammond	Lake
Friedman, Morris S.	South Bend	St. Joseph
Frith, Louis G.	South Bend	St. Joseph
Fromhold, Willis A.	Indianapolis	Marion
Frost, Robert J.	Michigan City	La Porte
Fry, Robert D.	Indianapolis	Marion
Fujawa, Matthew J.	Lakewood, Ohio	St. Joseph
Fuelling, James L.	Marion	Grant
Fullam, Richard G.	Fort Wayne	Allen
Fuller, Robert G.	Columbus	Bartholomew-Brown
Fullerton, Robert L.	Monticello	White
Fulton, William H.	Indianapolis	Marion
Fultz, Roy L.	Salem	Washington
Funkhouser, Elmer (S)	Indianapolis	Marion
Furr, Jack D.	Kingman	Fountain-Warren
Futterknecht, James O.	Elkhart	Elkhart

G

Gabe, William E.	Orinda, Calif.	Marion
Gabovitch, Edward R.	Indianapolis	Marion
Gabrielsen, Ted H.	Chicago, Ill.	Marion
Gaddy, Euclid T.	Indianapolis	Marion
Gaddy, Nelson D.	Indianapolis	Marion
Gaffney, Raymond	South Bend	St. Joseph
Gailey, Ivan	Clinton	Parke-Vermillion
Galante, Vincent J.	Gary	Lake
Galbreath, Jesse P. (S)	Burnettsville	White
Galliher, Marjorie J.	Muncie	Delaware-Blackford
Gallinatti, John J.	Gary	Lake
Galloway, John A.	Indianapolis	Marion
Gambill, J. Randolph	Indianapolis	Marion
Gambill, William D.	Indianapolis	Marion
Gammieri, Robert L.	Indianapolis	Marion
Gammell, Lindley L.	Columbus	Bartholomew-Brown
Ganser, Richard A.	Mishawaka	St. Joseph
Gante, Henry W. (S)	Anderson	Madison
Ganz, Max	Marion	Grant
Garber, J. Neill	Indianapolis	Marion
Garceau, George J.	Indianapolis	Marion
Gard, Daniel A.	Indianapolis	Marion
Gardiner, H. Glenn	East Chicago	Lake
Gardiner, Sprague H.	Indianapolis	Marion
Gardner, Austin L.	Indianapolis	Marion
Gardner, Buckman	Indianapolis	Marion
Gardner, Melvin D.	Michigan City	La Porte
Gardner, Russell A.	Michigan City	La Porte
Garfield, Martin D.	Indianapolis	Marion
Garland, Edgar A.	Evansville	Vanderburgh
Garling, Luvern C.	Muncie	Delaware-Blackford
Garner, W. Stanley	Indianapolis	Marion

Name	City	County
Garner, William H., Sr.	New Albany	Floyd
Garner, William H., Jr.	New Albany	Floyd
Garrett, John D. (S)	Indianapolis	Marion
Garrett, Robert A.	Indianapolis	Marion
Garrison, James L.	Cumberland	Hancock
Garrison, Leon J.	Gas City	Grant
Garst, Garland R.	Evansville	Vanderburgh
Garton, Harry W.	Fort Wayne	Allen
Garvin, Donald B.	Brazil	Clay
Gastineau, David C.	Fort Wayne	Allen
Gates, George E.	South Bend	St. Joseph
Gattman, George B.	Elkhart	Elkhart
Gatzimos, Christos D.	Logansport	Cass
Gaul, L. Edward	Evansville	Vanderburgh
Gaunt, Everett W.	Alexandria	Madison
Geckler, Charles E.	Muncie	Delaware-Blackford
Geick, Raymond G.	Fort Branch	Gibson
Geider, Roy A.	Indianapolis	Marion
Geiger, Dillon D.	Bloomington	Owen-Monroe
Geisinger, Lewis N. (S)	Auburn	De Kalb
Geisler, Hans E.	Indianapolis	Marion
Geller, Samuel	Evansville	Vanderburgh
Genovese, Pasquale	Indianapolis	Marion
Genna, Mary E. Miller	Indianapolis	Marion
Gentile, John P.	New Albany	Floyd
Gentile, Jonathan P.	Fort Wayne	Allen
George, Charles L.	Indianapolis	Marion
Gerding, William J.	Fort Wayne	Allen
Gerig, Eldon L.	Mishawaka	St. Joseph
Geronimo, Manuel M.	East Chicago	Lake
Geronimo, Rita R. V.	East Chicago	Lake
Gerrish, Donald A.	Terre Haute	Vigo
Gery, Richard E.	Lafayette	Tippecanoe
Getty, William H.	Evansville	Vanderburgh
Gevirtz, Milton B.	Hammond	Lake
Geyer, Joseph H.	New Albany	Floyd
Gibbs, Charles (S)	Greenfield	Hancock
Gibbs, Joseph W.	Martinsville	Hendricks
Gibson, Alois E.	Indianapolis	Marion
Gibson, Greta Maxine	Indianapolis	Marion
Gibson, Robert K.	Muncie	Delaware-Blackford
Gick, Herman H. (S)	Indianapolis	Marion
Giffin, Charles S.	Fort Wayne	Allen
Gifford, Fred E.	Indianapolis	Marion
Gilbert, Robert G.	Tell City	Perry
Gill, Dee D.	Marion	Grant
Gill, Donald R.	Huntington	Huntington
Gill, Thomas A.	Muncie	Delaware-Blackford
Gilles, Pierre	Gary	Lake
Gillespie, Charles F.	Indianapolis	Marion
Gillespie, Garland R.	Brownstown	Jackson-Jennings
Gillespie, Jacob E.	Indianapolis	Marion
Gilliland, John E.	Bilwaskarma, Nicaragua	Marion
Gillim, Parvin D.	Indianapolis	Marion
Gillotte, Joseph P.	Terre Haute	Vigo
Gillum, Eugene M.	Portland	Jay
Gilman, Marcus M.	South Bend	St. Joseph
Gilmore, Robert W.	Michigan City	LaPorte
Gilmore, Russell A. (S)	Michigan City	La Porte
Gingerick, Charles M.	Liberty Center	Wells
Ginsberg, Stewart T.	Indianapolis	Marion
Giorgio, Douglas J.	Evansville	Vanderburgh
Girod, Arthur H.	Decatur	Adams
Girod, Donald A.	Dunkirk	Jay
Gish, Howard M.	Brookston	Tippecanoe
Gitlin, Max M.	Bluffton	Wells
Gitlin, William A.	Bluffton	Wells
Given, Everett H.	Michigan City	La Porte
Glackman, John C., Jr.	Rockport	Spencer
Gladstone, Naf H.	Fort Wayne	Allen
Glassley, Stephen H.	Fort Wayne	Allen
Glendening, John L. (S)	Indianapolis	Marion
Glendening, Richard L.	Logansport	Cass
Glock, Homer E. (S)	Fort Wayne	Allen
Glock, Maurice E.	Fort Wayne	Allen
Glock, Wayne R.	Fort Wayne	Allen
Glover, John L.	Edgewood, Md.	Marion
Glover, William J.	Gary	Lake
Gobbel, Novy E. (S)	English	Harrison-Crawford
Godwin, Donald W.	Evansville	Marion
Goebel, Carl W.	Fort Wayne	Allen
Godersky, George E.	South Bend	St. Joseph
Goethals, Charles J.	Mishawaka	St. Joseph
Gold, Marvin E.	Valparaiso	Porter
Goldberg, Harold B.	Gary	Lake
Goldenberg, Norman S.	Indianapolis	Marion
Golding, Robert F.	Gary	Lake
Goldman, Samuel	Indianapolis	Marion
Goldsmith, David A.	Marion	Grant
Goldstone, Adolph	Gary	Lake
Goldstone, Arthur	Gary	Lake
Goldstone, Joseph	Gary	Lake
Goldstone, Robert J.	Gary	Lake
Goldstone, Sidney R.	Gary	Lake
Golper, Marvin N.	Kokomo	Howard
Good, Richard P.	Kokomo	Howard
Gooding, Richard A.	Indianapolis	Marion
Goodman, Eli	Charlestown	Clark
Goodman, Hubert T.	Terre Haute	Vigo
Goodrum, William R.	Cayuga	Parke-Vermillion
Goodwin, Thomas	Gary	Lake
Gootee, Francis H.	Jasper	Dubois
Gootee, Thomas H.	Jasper	Dubois
Gordon, Joseph L.	Wheeler	Porter
Gormley, Joseph J.	Indianapolis	Marion
Gosman, James H.	Indianapolis	Marion
Gossard, Meredith B.	Tipton	Tipton
Gossom, Donn R.	Terre Haute	Vigo
Gould, John C.	Fort Wayne	Allen
Gourieux, E. De Verre	Evansville	Vanderburgh
Govorchin, Alexander	East Chicago	Lake
Graber, Virgil R.	Elkhart	Elkhart
Graessle, Harold P.	Seymour	Jackson-Jennings
Graf, Jerome A.	Bloomfield	Greene
Graf, John P.	South Bend	St. Joseph
Graham, Edward W.	Indianapolis	Marion
Graham, George M.	Fort Wayne	Allen
Graham, James C.	Fort Wayne	Allen
Graham, John D.	Indianapolis	Marion
Graham, William E.	Alexandria, La.	Marion
Grant, Albert J.	Fort Wayne	Allen
Grant, Benjamin F.	Gary	Lake
Grant, M. Arthur	Fairmount	Grant
Grant, Phyllis A.	New Castle	Henry
Graves, Noel S.	Vevay	Jefferson-Switzerland
Graves, Orville M. (S)	Princeton	Gibson
Gray, Clyde C. (S)	Cloverdale	Putnam
Gray, Daniel E.	Crown Point	Lake
Gray, Edwin H.	Elkhart	Elkhart
Gray, Kenneth L.	Indianapolis	Marion
Gray, Leon	Martinsville	Morgan
Gray, Mary Case	Elkhart	Elkhart
Gray, William J.	Muncie	Delaware-Blackford
Grayson, Ted L.	Indianapolis	Marion
Grayston, Wallace S. (S)	Huntington	Huntington
Green, Frank H.	Rushville	Rush
Green, G. Richard	South Bend	St. Joseph
Green, George F.	South Bend	St. Joseph
Green, Leonard J.	Valparaiso	Porter
Green, Morris	Indianapolis	Marion
Green, Norval E.	South Bend	St. Joseph
Green, Robert F.	Fort Wayne	Allen
Greene, Frederick G. (S)	Seelyville	Parke-Vermillion

Name	City	County
Greene, Morgan E.	Indianapolis	Marion
Greene, Robert W.	Rensselaer	Jasper-Newton
Greene, William R.	Henryville	Clark
Greenlee, Robert L.	Fort Wayne	Allen
Gregg, Albert F.	Connersville	Fayette-Franklin
Gregg, Edwin E.	Thorntown	Boone
Gregoline, Amadeo F.	Gary	Lake
Gregoline, Eugene	Gary	Lake
Gregory, Robert L.	Indianapolis	Marion
Greiber, Marvin F.	Muncie	Delaware-Blackford
Greisen, Jack G.	Whiting	Lake
Greist, John H.	Indianapolis	Marion
Griep, Arthur H.	Evansville	Vanderburgh
Griest, Walter D.	Fort Wayne	Allen
Griffin, Charles G.	Valparaiso	Porter
Griffin, Joseph P.	Chesterton	Porter
Griffin, Leslie W.	Indianapolis	Marion
Griffith, Harold R.	Fort Wayne	Allen
Griffith, James W.	Sheridan	Hamilton
Griffith, Richard S.	Indianapolis	Marion
Griffith, Ross E.	Indianapolis	Marion
Grigsby, Hardin B.	Lebanon	Boone
Grillo, Donald	South Bend	St. Joseph
Grimes, Hubert N.	Indianapolis	Marion
Grimm, William C. H.	Evansville	Vanderburgh
Gripe, Richard P.	Lafayette	Tippecanoe
Grisell, Ted L.	Indianapolis	Marion
Grosso, William G.	East Chicago	Lake
Grorud, Alton C.	South Bend	St. Joseph
Grothouse, Carl B.	Kokomo	Howard
Grove, James H.	South Bend	St. Joseph
Grove, Robert H.	Rossville	Clinton
Gruber, Charles M.	Indianapolis	Marion
Gruesen, Robert A.	Indianapolis	Marion
Guckien, Joseph L.	Evansville	Vanderburgh
Guild, John K.	Plymouth	Marshall
Gustafson, Milton	Muncie	Delaware-Blackford
Gustaitis, John W.	Whiting	Lake
Guthrie, James R.	Richmond	Wayne-Union
Guthrie, James U.	Peru	Miami
Guthrie, William H.	Butlerville	Jackson-Jennings
Gutierrez, Peter E.	Crown Point	Lake
Gutstein, Richard R. (S)	Kendallville	Noble
Guttman, John B.	Wakarusa	Elkhart
Guzman, M. F.	Morocco	Jasper-Newton
Gwin, Merle D. (S)	Miami Beach, Fla.	Jasper-Newton

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Haas, Charles F.	Lafayette	Tippecanoe
Habegger, Elmer D.	Indianapolis	Marion
Hackett, Walter G.	Fort Wayne	Allen
Hade, Frederick L. (S)	Bridgeport	Marion
Hadey, James H.	Gary	Lake
Hadley, David	Indianapolis	Marion
Haffner, Herman G.	Fort Wayne	Allen
Hagan, Marion L.	French Lick	Orange
Haggard, David B.	Plainfield	Hendricks
Haggard, Edmund B.	Indianapolis	Marion
Hagman, Norman A.	Indianapolis	Marion
Haley, Alvin J.	Fort Wayne	Allen
Haley, Paul E.	South Bend	St. Joseph
Halfast, Richard W.	Kokomo	Howard
Hall, Bernard R.	Logansport	Cass
Hall, Donald L.	Petersburg	Pike
Hall, Frank M.	Indianapolis	Marion
Hall, Jack H.	Indianapolis	Marion
Hall, James M.	South Bend	St. Joseph
Hall, Robert S.	Muncie	Delaware-Blackford
Hall, Thomas C.	Chesterton	Porter
Hall, William R.	Fort Wayne	Allen
Halleck, Harold J.	Winamac	Pulaski
Haller, Richard C.	Fort Wayne	Allen
Haller, Robert L.	Kempton	Tipton
Haller, Thomas C.	Crawfordsville	Montgomery
Hamer, Homer G. (S)	Indianapolis	Marion
Hamilton, Antha A.	Vevay	Jefferson-Switzerland
Hamilton, Charles O.	South Bend	St. Joseph
Hamilton, Emory D.	Fort Wayne	Allen
Hamilton, George M.	Fort Wayne	Allen
Hamilton, Howard B.	Indianapolis	Marion
Hamilton, James R.	Mitchell	Lawrence
Hamilton, M. Luther (S)	Newberry	Greene
Hamilton, Orville G. (S)	Bluffton	Wells
Hamilton, Thomas	Columbia City	Whitley
Hammel, Howard T.	Bedford	Lawrence
Hammer, Jay W.	Indianapolis	Madison
Hammersley, George K.	Frankfort	Clinton
Hammond, R. Case	Evansville	Vanderburgh
Hammond, Stanley	Munster	Lake
Hampshire, Donald R.	Indianapolis	Marion
Hampton, James N.	Argos	Marshall
Han, Daniel	Gary	Lake
Hancock, John G.	Indianapolis	Marion
Haney, William K.	Madison	Jefferson-Switzerland
Hanley, Harriet F.	South Bend	St. Joseph
Hann, Eldon C.	Indianapolis	Marion
Hanna, Thomas A.	Indianapolis	Marion
Hannah, Jack W.	Elkhart	Elkhart
Hanneken, Vincent J.	Wabash	Wabash
Hannemann, Robert E.	Lafayette	Tippecanoe
Hansell, Robert M.	Indianapolis	Marion
Hanson, Martin F.	Elwood	Madison
Harcourt, Allan K.	Indianapolis	Marion
Harcourt, Robert S.	Indianapolis	Marion
Harden, Murray E.	Lafayette	Tippecanoe
Hardin, Wayne E.	Ossian	Wells
Harding, M. Richard	Indianapolis	Marion
Harding, Myron S.	Indianapolis	Marion
Hardtke, Eldred F.	Bloomington	Owen-Monroe
Hardy, John J. (S)	North Liberty	St. Joseph
Hare, Daniel M.	Evansville	Vanderburgh
Hare, Earl H. (S)	Indianapolis	Marion
Hare, Francis W., Jr.	Madison	Jefferson-Switzerland
Hare, Laura	Indianapolis	Marion
Harger, Robert W.	Indianapolis	Marion
Harkcom, Harry E.	St. Paul	Decatur
Harkness, Robert G.	Terre Haute	Vigo
Harless, Clarence M.	Chesterton	Porter
Harless, Fred	Monroeville	Allen
Harlan, William L.	Evansville	Vanderburgh
Harmon, Carl J.	Richmond	Wayne-Union
Harned, Ben K.	Evansville	Vanderburgh
Harold, Albert H. (S)	Indianapolis	Marion
Harold, Norris E. (S)	Indianapolis	Marion
Harper, James W.	East Chicago	Lake
Harrington, James F.	Logansport	Cass
Harris, Carl B.	Indianapolis	Marion
Harris, George F.	Madison	Jefferson-Switzerland
Harris, Neil	Elkhart	Elkhart
Harris, Paul N.	Indianapolis	Marion
Harris, Robert F.	Noblesville	Hamilton
Harris, Robert L.	Evansville	Vanderburgh
Harris, Robert W.	New Albany	Floyd
Harrison, Benjamin L.	New Castle	Henry
Harshman, James A.	Kokomo	Howard
Harshman, Louis P. (S)	Fort Wayne	Allen
Harstad, Casper	Rockville	Parke-Vermillion
Hart, L. Paul	Evansville	Vanderburgh
Hart, Robert B.	Columbus	Bartholomew-Brown

Name	City	County
Harter, Eli B.	Lafayette	Tippecanoe
Hartley, Clarence A., Jr.	Evansville	Vanderburgh
Hartman, John J.	Angola	Steuben
Hartsough, Ralph I.	Lakeville	St. Joseph
Hartz, F. Minton	Evansville	Vanderburgh
Harvey, Bennett B.	Lafayette	Tippecanoe
Harvey, Emerson C. Jr.	Muncie	Delaware-Blackford
Harvey, Harry C.	Fort Wayne	Allen
Harvey, John C.	Auburn	DeKalb
Harvey, Ralph J. (S)	Zionsville	Boone
Harvey, Verne K., Jr.	Indianapolis	Marion
Harvey, Verne K. Sr.	Indianapolis	Marion
Hasewinkel, Carroll W.	Carmel	Marion
Hasewinkle, August M.	Fort Wayne	Allen
Hash, John S.	Noblesville	Hamilton
Hashemi, Hossein	Warsaw	Kosciusko
Haslem, Ezra R.	Terre Haute	Vigo
Haslem, John R.	Terre Haute	Vigo
Haslinger, Clarence J.	Indianapolis	Marion
Hass, Caroline E.	W. Lafayette	Tippecanoe
Hass, Thomas W.	W. Lafayette	Tippecanoe
Hassel, Walter B.	Evansville	Vanderburgh
Hastings, Warren C.	Fort Wayne	Allen
Hatfield, Jack J.	Indianapolis	Marion
Hatfield, Nicholas W.	Indianapolis	Marion
Hathaway, C. Bishop	Ft. Riley, Kansas	Marion
Hattendorf, Anton P.	Fort Wayne	Allen
Hauersperger, Alfred D.	Columbus	Bartholomew-Brown
Haugseth, Ellsworth K.	South Bend	St. Joseph
Hauss, Augustus P. (S)	New Albany	Floyd
Havens, A. Lyle	Jeffersonville	Clark
Havens, Thomas R.	Jeffersonville	Clark
Havens, Oscar	Cicero	Hamilton
Havens, Russell E.	Fort Wayne	Allen
Hawes, James K. (S)	Columbus	Bartholomew-Brown
Hawes, Marvin E.	Columbus	Bartholomew-Brown
Hawk, James H.	Indianapolis	Marion
Hawkins, Glen E.	South Bend	St. Joseph
Hawkins, Richard D.	Bedford	Lawrence
Hawtof, David B.	Indianapolis	Marion
Hay, Gene R.	Michigan City	La Porte
Hayes, Frank W.	San Francisco, Calif.	Lake
Hayes, J. D., Jr.	St. Louis, Mo.	Lake
Hayes, Jesse D.	East Chicago	Lake
Hayes, Theodore R.	Muncie	Delaware-Blackford
Haymond, George M.	Warsaw	Kosciusko
Haymond, Joseph L.	Indianapolis	Marion
Haynes, John T.	Indianapolis	Marion
Hays, Everett L.	Indianapolis	Marion
Haywood, John G.	Noblesville	Hamilton
Headley, Lloyd M.	Lebanon	Boone
Healey, Robert J.	Indianapolis	Marion
Heard, Albert	Evansville	Vanderburgh
Heck, Martin C.	Jasper	Dubois
Heckaman, Edward L.	Pendleton	Madison
Hedde, Eugene L.	Logansport	Cass
Hedgcock, Robert A.	Frankfort	Clinton
Hedrick, James T.	Gary	Lake
Hedrick, Philip W.	Indianapolis	Marion
Heilman, William C., Jr.	New Castle	Henry
Heilman, W. C., Sr. (S)	New Castle	Henry
Heimburger, Robert F.	Indianapolis	Marion
Heinlein, Carl L.	Indianapolis	Marion
Heinrich, Weston A.	Evansville	Vanderburgh
Heinrichs, Harry H. (S)	Indianapolis	Marion
Held, George A.	Jasper	Dubois
Heller, Nelson L. (S)	Dunkirk	Jay
Helmen, Charles H.	Indianapolis	Marion
Helmen, Harry W. (S)	Rolling Prairie	St. Joseph
Helmer, Frederic A.	Cincinnati, Ohio	Allen
Helmer, John F.	South Bend	St. Joseph
Heminway, Norman L.	Elkhart	Elkhart
Hendershot, Eugene L.	Evansville	Vanderburgh
Henderson, Francis G.	Indianapolis	Marion
Henderson, Norman C.	Michigan City	La Porte
Henderson, Ramon A.	Muncie	Delaware-Blackford
Henderson, Robert N.	Brookston	Tippecanoe
Henderson, Roscoe C.	Indianapolis	Marion
Henderson, William P.	Indianapolis	Marion
Hendricks, Fred A.	Indianapolis	Marion
Hendricks, John W.	Indianapolis	Marion
Hendrix, Charles E.	Vincennes	Knox
Henley, Glenn (S)	Fairmount	Grant
Henn, R. Anthony	Greenfield	Hancock
Henry, Alvin L.	Columbus	Bartholomew-Brown
Henry, Howard J.	Knox	Starke
Henry, Russell S.	Indianapolis	Marion
Hensler, Benton M.	Anderson	Madison
Hepburn, C. K.	Indianapolis	Marion
Hepner, Herman	Kendallville	Noble
Hepner, Herman S.	Bloomington	Owen-Monroe
Herd, Cloyn R.	Peru	Miami
Herendeen, Elbie V.	Rochester	Fulton
Heritier, C. Jules	Columbia City	Whitley
Hermayer, Stephen	Evansville	Vanderburgh
Hernandez, I. C.	East Chicago	Lake
Herr, John W. (S)	Tell City	Perry
Herrick, Charles L.	Akron	Fulton
Herrmann, Gordon T.	Evansville	Vanderburgh
Herrold, George W.	Lafayette	Tippecanoe
Hershberger, Philip G.	Fort Wayne	Allen
Hershey, Ernest A. (S)	Churubusco	Whitley
Herzberg, Milton	Clinton	Parke-Vermillion
Herzer, Clarence C.	Evansville	Vanderburgh
Hess, Paul P.	New Albany	Floyd
Hetherington, John A.	Indianapolis	Marion
Hetman, Mitchell J.	Westville	La Porte
Heubi, John E.	Indianapolis	Marion
Hibbs, William G.	Franklin	Johnson
Hibner, Kermit Q.	Bloomington	Owen-Monroe
Hibner, Nolan A.	Monticello	White
Hickam, John B.	Indianapolis	Marion
Hickman, Donald M.	Fort Wayne	Allen
Hickman, Jack W.	Indianapolis	Marion
Hickman, Walter F. (S)	Indianapolis	Marion
Hicks, Murwyn L.	Indianapolis	Marion
Hicks, Wilbur P.	Indianapolis	Marion
Hieber, Frank R.	Indianapolis	Marion
Higgins, James L.	Minot A.F.B. N. Dakota	Pike
Higgins, John R.	New Albany	Floyd
Higgins, Kenneth E.	Fort Wayne	Allen
High, Ralph L.	Muncie	Delaware-Blackford
Hilbert, John W. (S)	South Bend	St. Joseph
Hildebrand, John O., Jr.	South Bend	St. Joseph
Hildebrand, William L.	Indianapolis	Marion
Hill, Gladys Marie	Richmond	Wayne-Union
Hill, Harold D.	Richmond	Wayne-Union
Hill, Howard E.	St. Thomas, Virgin Islands	Delaware-Blackford
Hill, James K.	Indianapolis	Marion
Hill, Kenneth G.	New Castle	Henry
Hill, Lloyd	Peru	Miami
Hill, Paul G.	Cambridge City	Wayne-Union
Hill, Robert E.	Yorktown	Delaware-Blackford
Hill, Theodore A.	South Bend	St. Joseph
Hill, Wallace C.	South Bend	St. Joseph
Hillenbrand, Charles	Michigan City	La Porte

Name	City	County
Hillery, John L.	Warsaw	Kosciusko
Hillery, Robert L.	Fort Wayne	Allen
Hillis, Lowell J.	Logansport	Cass
Hillman, Marion W.	Westville	St. Joseph
Hillman, Wm. H. (S)	South Bend	St. Joseph
Himebaugh, Gilbert J.	Evansville	Vanderburgh
Himler, James M.	Indianapolis	Marion
Hinchman, Jean F.	Parker	Delaware-Blackford
Hines, Archie V. (S)	Auburn	De Kalb
Hines, Don C.	Indianapolis	Marion
Hines, John H.	Auburn	De Kalb
Hippensteel, Harland	Auburn	De Kalb
Hippensteel, Russell R.	Culver	Marshall
Hipskind, Richard E.	Fort Wayne	Allen
Hirsch, Herman L.	Mt. Vernon	Posey
Hisrich, Lloyd W.	Batesville	Ripley
Hobbs, Arthur A.	Evansville	Vanderburgh
Hobgood, James L.	Evansville	Vanderburgh
Hochhalter, Marian	Logansport	Cass
Hodges, Fletcher (S)	Indianapolis	Marion
Hodgin, Phillip T.	Orleans	Orange
Hodurski, Zigfield	Gary	Lake
Hoetzer, Eldore M.	New Haven	Allen
Hoffman, Arthur F.	Fort Wayne	Allen
Hoffman, Doris	Vincennes	Knox
Hoffman, Herman	Indianapolis	Marion
Hoffman, Max N.	Covington	Fountain-Warren
Hofmann, J. William (S)	Indianapolis	Marion
Hogan, Michael A.	Indianapolis	Marion
Hogan, Thomas W.	Terre Haute	Vigo
Hogle, Frank D.	Warsaw	Kosciusko
Hoham, Frederick D.	Portage	Lake
Hoit, Leonard	Gary	Lake
Holdeman, Lillian S.	South Bend	St. Joseph
Holdeman, Richard W.	South Bend	St. Joseph
Holladay, Lloyd J.	Lafayette	Tippecanoe
Holland, Deward J. (S)	Bloomington	Owen-Monroe
Holland, William M.	Indianapolis	Marion
Holland, Philip T.	Bloomington	Owen-Monroe
Hollenberg, Alfred E.	Hagerstown	Henry
Hollenberg, Edward L.	Winamac	Pulaski
Holliday, Alfonso	Gary	Lake
Holman, Jerome E., Sr. (S)	Indianapolis	Marion
Holman, Jerome E., Jr.	Indianapolis	Marion
Holmes, Claude D. (S)	Coral Gables, Fla.	Clinton
Holmes, George H. Jr.	Indianapolis	Marion
Holmes, John L.	Muncie	Delaware-Blackford
Holsinger, Robert E.	Fort Wayne	Allen
Holtzman, Norman N.	South Bend	St. Joseph
Holtzman, Paul W.	Bloomington	Owen-Monroe
Honan, Paul R.	Lebanon	Boone
Hood, Ainslee A.	Indianapolis	Marion
Hooke, Samuel W. (S)	Noblesville	Hamilton
Hooker, Donald J.	Ligonier	Noble
Hoopes, Jane M.	Evansville	Vanderburgh
Hoover, Dewey A.	Terre Haute	Vigo
Hoover, J. Guy	Evansville	Vanderburgh
Hoover, Peter B.	Boonville	Warrick
Hopkins, Lester H.	Gary	Ripley
Hoppenrath, William (S)	Elwood	Madison
Horning, Richard R.	Logansport	Cass
Horst, William N.	Crown Point	Lake
Horswell, Richard G.	Bristol	Elkhart
Horswell, Richard R.	Lafayette	Tippecanoe
Horwitz, Thomas	Indianapolis	Marion
Hoskins, Phillip A.	San Francisco, Calif.	Lake
Hostetler, Carl M.	Goshen	Elkhart
Hostetter, Irwin S.	Muncie	Delaware-Blackford
Houser, D. Stanley	South Bend	St. Joseph
Houser, Wayne W.	Monon	White
Houshmand, Cyrus	Bloomington	Owen-Monroe
Houston, Fred D.	Lawrenceburg	Dearborn-Ohio
Hovda, Richard B.	Evansville	Vanderburgh
Hover, Galen	Marion	Grant
How, John T. (S)	Lakeville	St. Joseph
How, Louis E.	South Bend	St. Joseph
Howard, Joseph D.	Culver	Marshall
Howard, Wm. Harry	Hammond	Lake
Howe, Fordyce L.	Fort Wayne	Allen
Howell, Arthur	Indianapolis	Marion
Howell, Joseph D.	Indianapolis	Marion
Howell, Robert D.	Indianapolis	Marion
Hoyt, John M.	Kokomo	Howard
Hoyt, Lester H.	Indianapolis	Marion
Hoyt, Millard L.	Indianapolis	Marion
Hrisomalos, Frank N.	Bloomington	Owen-Monroe
Hubbard, Jesse D.	Indianapolis	Marion
Huber, Carl P.	Indianapolis	Marion
Huckleberry, Irvin E.	Salem	Washington
Hudson, Arlington M.	Connersville	Fayette-Franklin
Hudson, Foster J.	Indianapolis	Marion
Huffman, Galen C.	Bluffton	Wells
Huffman, Verlin P.	S. Whitley	Whitley
Hughes, Richard R.	Lafayette	Tippecanoe
Huggins, Victor S.	Evansville	Vanderburgh
Hull, De Wayne L.	Indianapolis	Marion
Hull, James E.	Lafayette	Tippecanoe
Hull, Ronald H.	Indianapolis	Marion
Hummel, Russel M.	Marion	Grant
Hummons, Francis D.	Indianapolis	Marion
Humphrey, Edward M.	Covington	Fountain-Warren
Humphrey, Paul E.	Terre Haute	Vigo
Humphreys, Joe E.	Vincennes	Knox
Humphreys, John L.	Fort Wayne	Allen
Humphreys, John W.	Crawfordsville	Montgomery
Hunsberger, Walter G.	Lafayette	Tippecanoe
Hunt, Edgar J.	Terre Haute	Vigo
Hunt, Gayle J.	Richmond	Wayne-Union
Hunt, Harold R.	Indianapolis	Marion
Hunt, Kenneth D.	Indianapolis	Marion
Hunter, Donn R.	Greenfield	Hancock
Hunter, Frank P. (S)	Lafayette	Tippecanoe
Hunter, Lowell G.	Lawrenceburg	Dearborn-Ohio
Huoni, John S.	Jeffersonville	Clark
Hurley, James W.	Elkhart	Elkhart
Hurley, John R.	Daleville	Delaware-Blackford
Hurt, LaVerne B.	Delray Beach, Fla.	Marion
Hurteau, William W.	Indianapolis	Marion
Huse, William M.	Indianapolis	Marion
Husted, Robert G.	Hammond	Lake
Hutchison, Donald R.	Fountain City	Wayne-Union
Hutto, William H.	Kokomo	Howard
Hyatt, Gilbert T.	Evansville	Vanderburgh
Hyde, Carroll C.	South Bend	St. Joseph

I

Imhof, Joseph D.	Muncie	Delaware-Blackford
Ingram, Richard	Montpelier	Delaware-Blackford
Ingwell, Guy B.	Knox	Starke
Inlow, Herbert H.	Shelbyville	Shelby
Inlow, Paul M.	Shelbyville	Shelby
Inlow, William D. (S)	Shelbyville	Shelby
Irish, Wilbur J.	East Chicago	Lake
Irmscher, George W.	Fort Wayne	Allen
Irvine, William O.	Indianapolis	Marion
Irwin, Glenn W., Jr.	Indianapolis	Marion
Irwin, Seth H. (S)	Anderson	Madison
Isenogle, Kenneth F.	Fort Wayne	Allen
Iske, Paul G.	Indianapolis	Marion
Isler, Nathaniel C.	Jeffersonville	Clark

Name	City	County
Iterman, George E. (S)	New Castle	Henry
Ivy, John H.	Elkhart	Elkhart
J		
Jackson, Charles E.	Bluffton	Wells
Jackson, Dean B.	Hartford City	Delaware-Blackford
Jackson, Frederick E. (S)	Indianapolis	Marion
Jackson, James W. (S)	Indianapolis	Marion
Jackson, John F.	Fort Wayne	Allen
Jackson, John K.	Aurora	Dearborn-Ohio
Jacobs, E. Robert	Columbus	Bartholomew-Brown
Jaeger, Alfred S. (S)	Indianapolis	Marion
Jahns, Albin A.	Gary	Lake
James, John M.	Tell City	Perry
James, Nicholas A. (S)	Tell City	Perry
James, Thomas, Jr.	Huntington	Huntington
Jankowski, Ernest B.	South Bend	St. Joseph
Jaquith, Orville S. (S)	Indianapolis	Marion
Jarrett, John C.	Marion	Grant
Jarrett, Paul E.	Anderson	Madison
Jay, Arthur N.	Indianapolis	Marion
Jay, James M.	Indianapolis	Marion
Jehanyar, M. Ali	South Whitley	Whitley
Jenkins, Robert E.	Indianapolis	Marion
Jennings, Frank L. (S)	Indianapolis	Marion
Jett, Clyde W.	Seelyville	Vigo
Jewell, Earl B. (S)	Birmingham, Michigan	Cass
Jewell, George M.	Kokomo	Howard
Jewett, Joe H.	Indianapolis	Marion
Jinnings, Loren E.	Garrett	De Kalb
Jobes, James E.	Indianapolis	Marion
Johns, David R. (S)	East Chicago	Lake
Johns, Nicholas C.	South Bend	St. Joseph
Johnson, Arnold L.	Gary	Lake
Johnson, Earl H.	Indianapolis	Marion
Johnson, Edward M.	Terre Haute	Vigo
Johnson, George M.	Richmond	Wayne-Union
Johnson, Harold V.	Evansville	Vanderburgh
Johnson, Herbert S.	Lafayette	Tippecanoe
Johnson, James B.	Greencastle	Putnam
Johnson, Jerome M.	Jeffersonville	Clark
Johnson, Lonnie B.	Gary	Lake
Johnson, Lowell R.	Lafayette	Tippecanoe
Johnson, Paul D.	Terre Haute	Vigo
Johnson, Stephen L.	Evansville	Vanderburgh
Johnson, Thomas W.	Indianapolis	Marion
Johnson, William A.	North Vernon	Jackson-Jennings
Johnson, William H.	Gary	Lake
Johnston, Donald D. (S)	Westville	La Porte
Johnston, Richard M.	Fort Wayne	Allen
Johnston, Robert G. (S)	Huntington	Huntington
Jolly, Lewis E.	Madison	Jefferson-Switzerland
Jolly, Wesley P. (S)	Richland	Spencer
Jones, Albert T.	Anderson	Madison
Jones, Allen W.	Indianapolis	Marion
Jones, Charles A.	Franklin	Johnson
Jones, David E.	Indianapolis	Marion
Jones, David G.	Anderson	Madison
Jones, David H.	Charlestown	Clark
Jones, David M.	Lafayette	Tippecanoe
Jones, Edwin F.	Rensselaer	Jasper-Newton
Jones, Eli S.	Hammond	Lake
Jones, Francis P.	Indianapolis	Marion
Jones, George L.	Indianapolis	Marion
Jones, Gordon C.	Indianapolis	Marion
Jones, Horace E.	Anderson	Madison
Jones, J. Carl	Logansport	Cass
Jones, John G. (S)	Vincennes	Knox
Jones, King S.	Michigan City	La Porte
Jones, Lawrence R.	Greencastle	Putnam
Jones, Roland W.	Camp Lejeune, N. C.	Marion
Jontz, Joe G.	Fort Wayne	Allen
Jontz, Richard L.	Fort Wayne	Allen
Jordan, Leo E.	Lynn	Randolph
Jordan, Richard A.	Corydon	Harrison-Crawford
Joseph, Rex M.	Indianapolis	Marion
Jowitt, Richard H.	Indianapolis	Marion
Judd, Donald R.	Indianapolis	Marion
Judd, Russell L.	Indianapolis	Marion
Judson, Walter E.	Indianapolis	Marion
Juergens, Richard B.	Fort Wayne	Allen
Jurgensen, Walter T.	Fort Wayne	Allen
Justin, Renate G.	Terre Haute	Vigo
K		
Kabel, Robert N.	Terre Haute	Vigo
Kahler, Maurice V.	Indianapolis	Marion
Kahn, Alexander J.	Indianapolis	Marion
Kahn, Howard L.	Indianapolis	Marion
Kaiser, George C.	Indianapolis	Marion
Kalb, Everett L.	Indianapolis	Marion
Kalker, Morton	Muncie	Delaware-Blackford
Kalsbeck, John E.	Indianapolis	Marion
Kaltenthaler, Albert	Gary	Lake
Kamen, Jack M.	Gary	Lake
Kamm, Bernard A.	South Bend	St. Joseph
Kammen, Leo	Indianapolis	Marion
Kammen, Robert	Oklahoma City, Okla.	Marion
Kammer, Grace C.	Muncie	Delaware-Blackford
Kammer, Walter F.	Muncie	Delaware-Blackford
Kantzer, Floyd B.	Garrett	De Kalb
Karberg, Richard J.	Lafayette	Tippecanoe
Karlick, Joseph	Arcadia	Hamilton
Karn, John W.	South Bend	St. Joseph
Karnafel, Eugene T.	Madison	Jefferson-Switzerland
Karol, Herbert J.	Fort Wayne	Allen
Karpel, Bernard	Mooresville	Hendricks
Karsell, William A.	Indianapolis	Marion
Kasting, Gerald	Bedford	Lawrence
Katterjohn, James C.	Indianapolis	Marion
Kauffman, Harley M.	Evansville	Vanderburgh
Kauffman, Nelson N.	Indianapolis	Marion
Kaufman, Julian R.	Fort Wayne	Allen
Kaufman, Lillie S.	Goshen	Elkhart
Kay, Oran E.	Spencer	Owen-Monroe
Keating, John U.	Elkhart	Elkhart
Kebel, Arthur P.	Indianapolis	Marion
Keck, Carleton A.	Fort Wayne	Allen
Keeling, Forrest E.	Portland	Jay
Keenan, George B.	Indianapolis	Marion
Keenan, Reid L.	Indianapolis	Marion
Keever, Charles H.	Indianapolis	Marion
Keiser, Venice D.	Indianapolis	Marion
Kellar, Philip E.	Hobart	Lake
Kelly, Don E.	Indianapolis	Marion
Kelly, Frank (S)	Argos	Marshall
Kelly, John B.	Evansville	Vanderburgh
Kelly, Wendell C.	Anderson	Madison
Kelsey, Lawrence E.	Phoenix, Ariz.	Fulton
Kelsey, Robert M., Jr.	La Porte	La Porte
Kelsey, Robert M., Sr.	La Porte	La Porte
Kemker, Bernard P.	Tell City	Perry
Kemp, John T.	Michigan City	La Porte
Kemp, W. Alfred	Bourbon	Marshall

Name	City	County
Kempf, Gerald F.	Rockville	Parke-Vermillion
Kendall, Forest M.	Nappanee	Elkhart
Kendall, William	Richmond	Wayne-Union
Kendrick, Frank J.	Gary	Lake
Kendrick, William M.	Mooresville	Morgan
Kennedy, Eva N. (S)	Camden	Carroll
Kennedy, Hunter F.	Indianapolis	Marion
Kennedy, Joseph T.	Indianapolis	Marion
Kennedy, Myron S.	Goshen	Elkhart
Kennedy, Walter U. (S)	New Castle	Henry
Kenney, David B.	Indianapolis	Marion
Kenney, Francis D.	Hammond	Lake
Kenoyer, Wilbur L.	Biloxi, Miss.	Marion
Kenshol, William S.	Owensville	Gibson
Kent, Richard N.	Fort Wayne	Allen
Kenyon, Charles E.	Cambridge City	Wayne-Union
Kenzler, Jack I.	Indianapolis	Marion
Kephart, S. Bruce	Bluffton	Wells
Kepler, Robert W.	La Porte	La Porte
Keplinger, James E.	Munster	Lake
Kercheval, John M.	Clinton	Parke-Vermillion
Kern, Clarence G.	Lebanon	Boone
Kerr, Charlotte H.	Michigan City	La Porte
Kerr, Donald M.	Bedford	Lawrence
Kerr, Harry R.	Indianapolis	Marion
Kerr, John E.	Michigan City	La Porte
Kerrigan, John F.	Michigan City	La Porte
Kerrigan, Robert L. (S)	Michigan City	La Porte
Kerrigan, William F.	Connersville	Fayette-Franklin
Keseric, N. E.	French Lick Springs	Orange
Kesim, Mufit	Elkhart	Elkhart
Kessler, Robert B.	Evansville	Vanderburgh
Ketcham, Jane M. (S)	Indianapolis	Marion
Ketcham, John S. (S)	Rossville	Clinton
Keyes, Robert C.	Fort Wayne	Allen
Khaton, Odessa M.	Gary	Lake
Kidd, James G. (S)	Roann	Wabash
Kidder, Orva T.	Fort Wayne	Allen
Kiechle, Frederich L.	Evansville	Vanderburgh
Kiely, John T.	Anderson	Madison
Kilgore, Byron W.	Ft. Wayne	Allen
Kilmer, Warren L.	Portage	Porter
Kim, Joon S.	Muncie	Delaware-Blackford
Kim, Young D.	Beech Grove	Marion
Kimbrough, Robert F.	Fort Wayne	Allen
Kime, Charles E.	Richmond	Wayne-Union
Kime, Edwin N. (S)	Bloomington	Marion
Kimmel, George E.	Evansville	Vanderburgh
Kincaid, Raymond K.	Tipton	Tipton
Kincaid, Robert S.	Evansville	Vanderburgh
Kindell, Hurschell D.	New Richmond	Montgomery
King, Harold	Indianapolis	Marion
King, Jay M.	Logansport	Cass
King, Joseph W.	Anderson	Madison
King, Robert W.	Cedar Lake	Lake
King, William E.	Indianapolis	Marion
Kingsbury, John K. (S)	Indianapolis	Marion
Kinneman, Robert E.	Greenfield	Hancock
Kintner, Burton E.	Elkhart	Elkhart
Kinzel, Robert J. W.	Indianapolis	Marion
Kirby, Ted C.	Greenfield	Hancock
Kirkhoff, Paul J.	Indianapolis	Marion
Kirklin, Oren L.	Indianapolis	Marion
Kirshman, Forrest E.	Muncie	Delaware-Blackford
Kirtley, James M.	Crawfordsville	Montgomery
Kirtley, Robert W.	Danville	Hendricks
Kirtley, William R.	Indianapolis	Marion
Kissel, Wesley A.	Indianapolis	Marion
Kissinger, Knight L.	Angola	Steuben
Kistler, James J.	La Porte	La Porte
Kistner, Arthur W.	Elkhart	Elkhart
Kitterman, Harry E.	Indianapolis	Marion
Klain, Benjamin V.	Indianapolis	Marion
Klamer, Charles H.	Jasper	Dubois
Klassen, Otto D.	Elkhart	Elkhart
Klatch, Ben Z.	Lafayette	Tippecanoe
Kleifgen, William A.	Fort Wayne	Allen
Klein, Emanuel	Bloomington	Owen-Monroe
Kleindorfer, Roscoe L.	Evansville	Vanderburgh
Kleinman, Francis J. (S)	Hebron	Porter
Kleopfer, Ronald G.	Fort Wayne	Allen
Klepfer, Jefferson F.	Richmond	Wayne-Union
Klepinger, Carol A.	Indianapolis	Marion
Klepinger, Harry E.	Lafayette	Tippecanoe
Kline, Charles D.	Vincennes	Knox
Klingerman, John J.	Camp Roberts, Calif.	Marion
Klooze, Kenneth W.	Fort Wayne	Allen
Klos, Stanley J.	Valparaiso	Porter
Kmak, Chester	Hammond	Lake
Knapp, Arthur L. (S)	South Bend	St. Joseph
Kneidel, John H.	Indianapolis	Marion
Knight, Lewis W.	Fort Wayne	Allen
Knode, Kenneth T.	South Bend	St. Joseph
Knotts, Halleck S.	Columbus	Bartholomew-Brown
Knotts, Slater	Columbus	Jackson-Jennings
Knowles, Charles Y.	Indianapolis	Marion
Knowles, Robert P.	Indianapolis	Marion
Ko, Richard	Gaston	Delaware-Blackford
Kobrin, Meyer W.	Gary	Lake
Koch, Edwin F. Jr.	Muncie	Delaware-Blackford
Koch, Elmer L.	Danville	Hendricks
Koch, Howard W.	Winchester	Randolph
Koehler, Elmer G.	Elkhart	Elkhart
Koenig, Robert L.	Valparaiso	Porter
Kohlstaedt, Karl C.	Indianapolis	Marion
Kohlstaedt, Kenneth G.	Indianapolis	Marion
Kohne, Gerald J.	Decatur	Adams
Kohne, Robert W.	Lafayette	Tippecanoe
Kolanko, Leon A.	Hammond	Lake
Kolettis, John G.	Gary	Lake
Komoroske, John E.	East Chicago	Lake
Kooiker, John E.	Indianapolis	Marion
Koons, Karl M. (S)	Indianapolis	Marion
Koontz, William A.	Gas City	Grant
Kopanko, Bernard F.	East Chicago	Lake
Kopcha, Joseph E.	Gary	Lake
Kopecky, Robert R.	Indianapolis	Marion
Kopp, William R.	Anderson	Madison
Koransky, David S.	Hammond	Lake
Korn, Jerome M.	Gary	Lake
Kornafel, L. H.	Indianapolis	Marion
Koss, K. William	Muncie	Delaware-Blackford
Kott, Alexander	Munster	Lake
Krabill, Willard S.	Goshen	Elkhart
Kraft, Bennett	Indianapolis	Marion
Kraning, Kenneth K.	Kewanna	Fulton
Krause, Friedrich	Elkhart	Elkhart
Kreitl, Dorothy R.	Richmond	Wayne-Union
Kremers, George A.	Kokomo	Howard
Kresler, Leon E.	Kentland	Tippecanoe
Kress, James W.	Muncie	Delaware-Blackford
Krieble, William W.	Terre Haute	Vigo
Kriel, William B.	Indianapolis	Marion
Krsek, Archie J.	Hobart	Lake
Krueger, John E.	Fort Wayne	Allen
Krueger, John E.	South Bend	St. Joseph

Name	City	County
Krueger, Robert B.	Columbus	Bartholomew-Brown
Kruse, Walter E.	Fort Wayne	Allen
Kubik, Francis J.	Michigan City	La Porte
Kubley, James D.	Plymouth	Marshall
Kudele, Louis T.	Whiting	Lake
Kuhn, Arthur J.	Hammond	Lake
Kuhn, Frederick L.	South Bend	St. Joseph
Kuhn, Hedwig S.	Hammond	Lake
Kuhn, Robert W.	Wilkinson	Hancock
Kuipers, Fred M.	Lafayette	Tippecanoe
Kunkler, Arnold W.	Terre Haute	Vigo
Kunkler, Joseph (S)	Terre Haute	Vigo
Kunkler, William C. (S)	Terre Haute	Vigo
Kuntz, Herman W.	Indianapolis	Marion
Kurlander, Gerald J.	Red Bank, N. J.	Marion
Kurtz, Fred B. (S)	Indianapolis	Marion
Kurtz, Philip L.	Indianapolis	Marion
Kurtz, Richard	Ft. Riley, Kansas	Marion
Kurtz, William A.	Tipton	Tipton
Kwitny, Isadore J.	Indianapolis	Marion
Kyle, Michael A.	Indianapolis	Lake

L

LaBier, Clarence R. Jr.	Terre Haute	Vigo
LaBier, Clarence R. (S)	Terre Haute	Vigo
Lacy, John D., Jr.	Medaryville	Pulaski
Ladig, Donald S.	Fort Wayne	Allen
LaDine, Clarence B.	Indianapolis	Marion
LaFollette, Donald R.	New Albany	Floyd
LaFollette, Forrest R.	Hammond	Lake
LaFollette, Robert E.	New Albany	Floyd
Lahr, Richard E.	Marion	Grant
Laker, Gene C.	Fort Wayne	Allen
Laker, Richard J.	Fort Wayne	Allen
Lalonde, Alban H.	Washington	Daviess-Martin
Lamb, Emmett B.	Indianapolis	Marion
Lamb, J. Leonard	South Bend	St. Joseph
Lamb, Russell W.	Indianapolis	Marion
Lamber, Chet K.	Indianapolis	Marion
Lamey, James L.	Anderson	Madison
Lamey, Paul T.	Anderson	Madison
Lamkin, E. Henry, Jr.	Indianapolis	Marion
Lampe, Elfred H.	Fort Wayne	Allen
Lancet, Robert O.	Terre Haute	Vigo
Land, Francis L.	Fort Wayne	Allen
Land, Richard N.	Anderson	Madison
Landis, Charles B.	Lafayette	Tippecanoe
Landon, David J.	Union City	Randolph
Lands, Robert M.	Portage	Porter
Landwehr, Alfons	Indianapolis	Marion
Lane, Charlotte E.	Indianapolis	Marion
Lane, William H.	South Bend	St. Joseph
Lang, Erich K.	Indianapolis	Marion
Lang, Joseph E.	South Bend	St. Joseph
Langohr, John L.	Columbia City	Whitley
Langrall, Harrison M., Jr.	Marion	Grant
Lanman, John U.	Munster	Lake
Lanning, R. Adrian	Noblesville	Hamilton
Lansford, Kenneth G.	LaPorte	Marion
Laramore, Ward	Indianapolis	Marion
Largaespada, Manuel	Indianapolis	Marion
Larmore, Joseph L.	Anderson	Madison
Larrabee, James F.	Munster	Lake
Larson, Goyt O.	La Porte	La Porte
LaSalle, Richard M.	Wabash	Wabash
LaSalle, Robert M., Jr.	Wabash	Wabash
LaSalle, Robert M., Sr.	Wabash	Wabash
Lashmet, Michael H.	Indianapolis	Marion
Lasich, Anthony R.	Indianapolis	Marion
Laubscher, Clarence	Evansville	Vanderburgh
Laudeman, Walter A.	Elwood	Madison
Lauer, Dorothy B.	Dana	Parke-Vermillion
Lautz, Herbert A.	Hammond	Lake
Lavengood, Russell W.	Marion	Grant
Lawler, George F.	Cape Coral, Florida	Marion
Lawrence, John O.	South Bend	St. Joseph
Lawrence, Joseph C.	Evansville	Vanderburgh
Lawson, Allan J.	Indianapolis	Marion
Lawson, Isaac H. (S)	Kendallville	Noble
Laycock, Richard M.	Fort Wayne	Allen
Layman, Douglas C.	Indianapolis	Marion
Lazo, Vicente R.	Gary	Lake
Leahy, Howard J.	Pendleton	Madison
Leak, Robert H.	Boswell	Benton
Leasure, J. Kent (S)	Indianapolis	Marion
Leatherman, Harter L.	Indianapolis	Marion
Lebioda, Henry S.	Gary	Lake
Lee, Glen Ward	Richmond	Wayne-Union
Lee, James	Terre Haute	Vigo
Lee, John M. (S)	Rushville	Rush
Lee, Robert Y.	Valparaiso	Porter
Leffel, James M.	Indianapolis	Marion
Leffler, William T.	Indianapolis	Marion
Lehman, David P.	Indianapolis	Marion
Lehman, Emery W.	Bluffton	Wells
Lehman, Kenneth M.	Topeka	LaGrange
Lehmberg, Otto F. C.	Columbia City	Whitley
Leibundguth, Henry	Evansville	Vanderburgh
Leich, Charles F.	Evansville	Vanderburgh
Leinbach, Earl R.	Hamlet	Starke
LeMaster, Theodore R.	Indianapolis	Marion
Leming, Ben L.	Fort Wayne	Allen
Lenk, George G.	Fort Wayne	Allen
Lenox, Jack	Lebanon	Boone
Leonard, Henry S. (S)	Indianapolis	Marion
Leroy, Alvin G.	Alexandria	Madison
Leser, Ralph U.	Indianapolis	Marion
Lessure, Alfred P.	Evansville	Vanderburgh
Lester, Vern L.	South Bend	St. Joseph
Lett, Emory B.	Loogootee	Daviess-Martin
Levatin, Bernard I.	South Bend	St. Joseph
Levering, Guy P. (S)	Lafayette	Tippecanoe
Levi, Leon	Indianapolis	Marion
Levin, Eli L. (S)	East Chicago	Lake
Levin, Ralph T.	Indianapolis	Marion
Levkoff, Abner H.	South Bend	St. Joseph
Lewis, Earl T.	Evansville	Vanderburgh
Lewis, George N.	Gary	Lake
Lewis, James F.	Liberty	Wayne-Union
Lewis, Lucien A.	Gary	Lake
Lewis, Paul S.	Indianapolis	Marion
Lewis, R. Earl	Indianapolis	Marion
Lewis, Robert J.	Lawrence	Marion
Lewis, W. Richard	Gary	Lake
Ley, Glen D.	Indianapolis	Marion
Lichtenberg, Melvin	Indianapolis	Marion
Liddell, Charles K.	Michigan City	La Porte
Lidikay, Edward C.	Indianapolis	Marion
Life, Homer L.	New Castle	Henry
Lind, Jaap J.	Mulberry	Tippecanoe
Lindenborg, Paul G.	Indianapolis	Marion
Lindgren, Ivan T.	Lawrenceburg	Dearborn-Ohio
Lindsay, Hamlin B.	Washington	Daviess-Martin
Ling, John F.	Richmond	Wayne-Union
Lingeman, Byron N.	Crawfordsville	Montgomery
Lingeman, Raleigh E.	Indianapolis	Marion
Lingeman, Roger E.	Indianapolis	Marion
Link, Charles W., Jr.	Greenwood	Johnson
Link, Goethe (S)	Indianapolis	Marion
Link, William C.	Bloomington	Owen-Monroe
Lionberger, John R.	South Bend	St. Joseph
Lippoldt, Charles L.	Oldenburg	Ripley
Lipschutz, Harold	Gary	Lake
Lipsey, Alfred J.	Gary	Lake
Liss, Emanuel C.	South Bend	St. Joseph
Little, John W. (S)	Decatur, Ill.	Marion

Name	City	County
Littlefield, Paul A.	Indianapolis	Marion
Littlefield, Shirley	Indianapolis	Marion
Litzenberger, Sam W.	Anderson	Madison
Llamas, Dominador F.	North Judson	Starke
Lloyd, Frank P.	Indianapolis	Marion
Lloyd, Joe R.	Noblesville	Hamilton
Lloyd, Robert P.	Fort Wayne	Allen
Lockhart, Jack M.	Connersville	Fayette-Franklin
Lockhart, Philip B.	South Bend	St. Joseph
Loehr, William M.	Indianapolis	Marion
Loewenstein, Werner L.	Terre Haute	Vigo
Logan, James Z.	Richmond	Wayne-Union
Logan, Richard S.	Fort Wayne	Allen
Lohman, Robert M.	Fort Wayne	Allen
Lohoff, Lewis C.	Tell City	Perry
Loh, Hwei Ya (Chang)	Gary	Lake
Loh, Wei-Ping	Gary	Lake
Long, Keith J.	Hammond	Lake
Long, Malcolm D.	Indianapolis	Hamilton
Long, Max R.	Marion	Grant
Long, Paul L.	Anderson	Madison
Longshore, Robert E.	Kokomo	Howard
Lonngren, Dudley H.	Marion	Grant
Loomis, Charles H.	Richmond	Wayne-Union
Loomis, Norman S.	Indianapolis	Marion
Loop, Frederick A.	Lafayette	Tippecanoe
Lord, Glen C.	Indianapolis	Marion
Lorenty, Thaddeus B.	Gary	Lake
Lorman, James G.	Fort Wayne	Allen
Louden, Robert W.	Indianapolis	Marion
Loudermilk, Jack L.	Fort Wayne	Allen
Loudermilk, Richard G.	Indianapolis	Marion
Loughlin, Lawrence L	Indianapolis	Marion
Love, George N.	Indianapolis	Marion
Love, V. Logan	Marion	Grant
Lovell, Martin H.	Gary	Lake
Lovett, Harvey D.	Whitestown	Boone
Loving, Jury B.	New Goshen	Vigo
Lowry, Donald J.	Muncie	Delaware-Blackford
Lozow, David	Indianapolis	Marion
Lucas, Clarence A., Jr.	Indianapolis	Marion
Luckett, Coen L. (S)	Terre Haute	Vigo
Ludwig, Paul E.	Crawfordsville	Montgomery
Luginbill, Howard M.	Berne	Adams
Lukemeyer, George T.	Indianapolis	Marion
Lukemeyer, St. John	Jasper	Dubois
Lundblad, Wilfred M.	Bloomington	Owen-Monroe
Lundeberg, Ralph A.	Griffith	Lake
Lundt, Milo O.	Elkhart	Elkhart
Lunsford, Thomas E.	Indianapolis	Marion
Lurie, Paul R.	Indianapolis	Marion
Luros, J. Theodore	Indianapolis	Marion
Lutes, David L. (S)	Edinburg	Johnson
Luther, William C.	Elkhart	Elkhart
Lutz, Georgianna	Gary	Lake
Luzadder, John E.	New Carlisle	St. Joseph
Lybrook, Daniel E. (S)	Young America	Cass
Lybrook, William B.	Indianapolis	Marion
Lyman, Frank L.	Yonkers, N. Y.	Vanderburgh
Lynch, Harold D.	Evansville	Vanderburgh
Lynch, Otis R.	Marengo	Harrison-Crawford
Lynn, Gene E.	Indianapolis	Marion
Lyon, Florence M.	Portland	Jay
Lyon, William C.	Fort Wayne	Allen
Lyons, L. Mason	Terre Haute	Vigo
Lyons, Robert E.	Bloomington	Owen-Monroe
Lytwakiwsky, Anatol	Gary	Lake

M

MacDonell, Eldred H.	South Bend	St. Joseph
MacDougall, John D.	Indianapolis	Marion
MacKenzie, Pierce	Evansville	Vanderburgh
Machledt, John H.	Whiteland	Johnson
Mackel, Frederick O.	Fort Wayne	Allen
Mackey, Colonel G. (S)	Logansport	Cass
Mackey, Harry S. (S)	Indianapolis	Marion
Mackey, John E.	Indianapolis	Marion
Macri, Paul A.	Mishawaka	St. Joseph
Macy, George W.	Columbus	Bartholomew-Brown
Madlang, Rodolfo M.	Munster	Lake
Madden, Robert J.	Indianapolis	Marion
Mader, John H.	Richmond	Wayne-Union
Madston, A. Ricks	Indianapolis	Marion
Magennis, Herbert L. (S)	Indianapolis	Marion
Mahaffey, John E.	Indianapolis	Marion
Mahank, Camiel C.	Mishawaka	St. Joseph
Mahoney, Charles L.	Terre Haute	Vigo
Majsterek, Stanley L.	Gary	Lake
Makovsky, Theodore	Valparaiso	Porter
Malcolm, Russell L., Jr.	Indianapolis	Marion
Malcolm, Russell L.	Richmond	Wayne-Union
Malone, Leander A.	Terre Haute	Vigo
Malott, Fred R.	Converse	Miami
Malouf, Stephen D. (S)	Peru	Miami
Malstaff, Comiel M.	Mishawaka	St. Joseph
Manalan, Maurice M.	Indianapolis	Marion
Manalo, Francisco S.	Gary	Lake
Manders, Karl L.	Indianapolis	Marion
Manhart, Doyle B.	Sheridan	Hamilton
Manifold, Harold M.	Bloomington	Owen-Monroe
Manion, Marlow W.	Indianapolis	Marion
Mankin, William J.	Terre Haute	Vigo
Mann, Mortimer	Indianapolis	Marion
Mann, Richard E.	Parris Island, N. C.	Marion
Manner, Richard J.	Evansville	Vanderburgh
Manning, George C.	Fort Wayne	Allen
Manning, K. Randolph	Indianapolis	Marion
Mannion, Rodney A.	Michigan City	La Porte
Manship, Stanley S.	Paoli	Orange
Mansueto, Mario D.	Hammond	Lake
Manzie, Michael W.	Indianapolis	Marion
Maple, James B. (S)	Sullivan	Sullivan
Marchand, Edwin V.	Haubstadt	Gibson
Marchant, Clarence H.	Bloomington	Owen-Monroe
Marcus, Emanuel	Hammond	Lake
Marcus, Morris C.	Gary	Lake
Maris, Lee J.	Attica	Fountain-Warren
Markle, Joseph G.	Hobart	Lake
Mark, George A.	Elkhart	Elkhart
Marks, Howard H.	Huntington	Huntington
Marks, Maurice I.	Indianapolis	Marion
Marks, Ora L.	East Chicago	Lake
Marks, Salvo P.	Hammond	Lake
Markstone, David H.	Indianapolis	Marion
Maroc, James A.	Hammond	Lake
Marquinez, Adoracion	East Chicago	Lake
Marquis, Gordon	South Bend	St. Joseph
Marr, Griffith	Columbus	Bartholomew-Brown
Marsh, Carl M.	Indianapolis	Marion
Marsh, George W.	Lafayette	Tippecanoe
Marshall, Albert L., Jr.	Indianapolis	Marion
Marshall, Caesar L.	Fort Wayne	Allen
Marshall, Cavins R. (S)	Indianapolis	Marion
Marshall, George L. (S)	Bourbon	Marshall
Marshall, Millard R.	Gary	Lake
Marshall, Thos. J. (S)	Charlestown	Clark
Marshall, W. J. Jr.	Hammond	Lake
Marske, Robert L.	Michigan City	La Porte
Martin, Charles E. (S)	Lynn	Randolph
Martin, Charles F.	Mishawaka	St. Joseph
Martin, Floyd S.	Goshen	Elkhart
Martin, Guy	Seymour	Jackson-Jennings
Martin, Hugh E.	Indianapolis	Marion

Name	City	County
Martin, Joe M.	Lafayette	Tippecanoe
Martin, Loren H.	Indianapolis	Marion
Martin, Paul H.	Elkhart	Elkhart
Martin, Samuel W.	Corydon	Harrison-Crawford
Martinov, William E.	South Bend	St. Joseph
Martirez, N. A.	Schererville	Lake
Martz, Bill L.	Indianapolis	Marion
Martz, Carl D.	Indianapolis	Marion
Marvel, Howard R.	Lafayette	Tippecanoe
Marvel, James A.	Evansville	Vanderburgh
Marvel, Robert J.	Indianapolis	Marion
Maschmeyer, Robert H.	Logansport	Cass
Mason, Bernard A.	South Bend	St. Joseph
Mason, Donald G.	Angola	Steuben
Mason, Everett E.	Evansville	Vanderburgh
Mason, John C.	Munster	Lake
Mason, Lester M.	Terre Haute	Vigo
Mason, Richard L.	Hammond	Lake
Massanari, Walter S.	Millersburg	Elkhart
Masters, John M.	Indianapolis	Marion
Masters, Robert J.	Indianapolis	Marion
Mastrangelo, M. J.	Fort Wayne	Allen
Mather, Charles R.	Lafayette	Tippecanoe
Mather, J. Winford	East Gary	Lake
Mather, Robert L.	Lafayette	Tippecanoe
Mathews, James R.	Evansville	Vanderburgh
Mathewson, Russell C.	Anderson	Delaware-Blackford
Mathys, Alfred (S)	Louisville, Ky.	Harrison-Crawford
Matthew, John R.	Westville	La Porte
Matthew, W. Burleigh	Indianapolis	Marion
Matthews, Bernard J.	Indianapolis	Marion
Matthews, William M.	Indianapolis	Marion
Mattmiller, Everett D.	Avilla	Noble
Mattox, Don M.	Terre Haute	Vigo
Matzen, Richard N.	Bluffton	Wells
Maurer, J. Frank	Brazil	Clay
Maurer, Robert M.	Brazil	Clay
Mauricio, Amado S. A.	Rising Sun	Ripley
Mauzy, Merritt C.	South Bend	St. Joseph
Maxam, B. T.	Indianapolis	Marion
Maxson, Roy V.	Evansville	Vanderburgh
May, George A.	Madison	Jefferson-Switzerland
May, Richard M.	Gary	Lake
May, William D.	Rockville	Parke-Vermillion
Mayberry, Alton	Chapel Hill, N. C.	Vanderburgh
Mayfield, Clifford H. (S)	Reynolds	White
McAdams, Hugh B.	Lafayette	Tippecanoe
McAdams, Robert	Lafayette	Tippecanoe
McAleese, George B.	Terre Haute	Vigo
McAlpine, Richard J.	Indianapolis	Marion
McArdle, Edward G.	Fort Wayne	Allen
McAree, Francis E.	Indianapolis	Marion
McArt, Bruce A.	Elkhart	Elkhart
McAtee, Ott B.	Madison	Jefferson-Switzerland
McBride, James S.	Indianapolis	Marion
McBride, Noel S.	Terre Haute	Vigo
McCalla, Charles X.	Paoli	Orange
McCallister, John W.	Fort Wayne	Allen
McCallum, Donald C.	Indianapolis	Marion
McCallum, Joseph T. C. (S)	Indianapolis	Marion
McCallum, Robert N.	Indianapolis	Marion
McCarthy, Daniel F. Jr.	Indianapolis	Marion
McCartney, Donald H.	Indianapolis	Marion
McCarty, Virgil	Princeton	Gibson
McClain, Edwin S.	Indianapolis	Marion
McClain, Marvin L.	Scottsburg	Scott
McClary, Charles W.	Graysville, Ill.	Vanderburgh
McClellan, John B.	Muncie	Delaware-Blackford
McClelland, Donald C. (S)	Lafayette	Tippecanoe
McClelland, Harry N.	New Castle	Henry
McClintock, James A.	Muncie	Delaware-Blackford
McClure, Clark	Knox	Starke
McClure, Glen	Sullivan	Sullivan
McClure, Morris E.	Union City	Randolph
McClure, Stanley E.	Monon	White
McClure, Warren N.	Kokomo	Howard
McConnaughey, Hal D.	Indianapolis	Marion
McConnell, William C.	Sunman	Ripley
McCool, Joseph H.	Evansville	Vanderburgh
McCord, Carl B. (S)	Veedersburg	Fountain-Warren
McCormack, Lloyd L.	Fremont	Steuben
McCormick, Charles O., Jr.	Indianapolis	Marion
McCormick, Hubert D. (S)	Vincennes	Knox
McCormick, Wilbur C.	Brazil	Clay
McCoy, George E.	Muncie	Delaware-Blackford
McCoy, Roy R.	Fort Wayne	Allen
McCraley, William J.	South Bend	St. Joseph
McCrea, Fred R.	Terre Haute	Vigo
McCullough, Henry G.	Columbus	Bartholomew-Brown
McCullough, James Y.	New Albany	Floyd
McDaniel, Franklin P. (S)	Atlanta	Hamilton
McDonald, Frank C.	New Castle	Henry
McDonald, Joseph D.	Evansville	Vanderburgh
McDonald, Ralph M.	South Bend	St. Joseph
McDonald, Virgil G. (S)	Anderson	Madison
McDowell, Fletcher W.	Muncie	Delaware-Blackford
McDowell, George A.	Fort Wayne	Allen
McDowell, Mordecai M.	Vincennes	Knox
McEachern, Cecil G.	Fort Wayne	Allen
McElroy, James S.	New Castle	Henry
McElroy, Robert S.	Princeton	Gibson
McEwen, James W.	Terre Haute	Vigo
McFadden, James M.	Lafayette	Tippecanoe
McFarland, Corley B.	South Bend	St. Joseph
McGrath, Michael F.	Indianapolis	Marion
McGue, Frank J.	Michigan City	La Porte
McGuff, Paul E.	Weston, Mass.	Marion
McGuire, D. F. (S)	East Chicago	Lake
McIlroy, Richard J.	Richmond	Wayne-Union
McIlwain, Eleanor E.	Warren	Grant
McIlwain, Robert E.	Warren	Grant
McIndoo, Ralph E. (S)	Kokomo	Howard
McIntire, Clarence R.	Bloomington	Owen-Monroe
McIntosh, Wilbert	Riley	Vigo
McIntyre, Charles J. (S)	Indianapolis	Marion
McIntyre, James M.	Indianapolis	Marion
McKechnie, Robert K.	Jeffersonville	Clark
McKee, Harry G.	Rushville	Rush
McKee, Roy G.	New Castle	Henry
McKeeman, Donald H.	Fort Wayne	Allen
McKeon, Edward C.	Evansville	Vanderburgh
McKinley, A. David	Indianapolis	Marion
McKinley, Joseph	Lafayette	Tippecanoe
McKinney, Daniel H.	Lafayette	Tippecanoe
McKinney, Donald L.	Otterbein	Benton
McKittrick, Jack	Washington	Daviess-Martin
McLain, Clarence R., Jr.	Wright-Patterson AFB, Ohio	Marion

Name	City	County
McLaren, Daniel E.	Indianapolis	Marion
McLaughlin, Gordon C.	Terre Haute	Vigo
McLaughlin, James R.	Flora	Carroll
McLean, James S.	Munster	Lake
McMahan, Virgil C.	Vincennes	Knox
McMath, Samuel B.	Gary	Lake
McMeel, James	South Bend	St. Joseph
McMichael, Frank J. (S)	Hernando, Fla	Lake
McNabb, George B. (S)	Carthage	Rush
McNabb, Richard C.	Carthage	Rush
McNaughton, Lawrence	Washington	Daviess-Martin
McNeely, Matthew J.	Dillsboro	Dearborn-Ohio
McPherson, Thomas C.	San Mateo, Calif.	Vanderburgh
McQuiston, Ralph J.	Indianapolis	Marion
McTurnan, Robert W.	Indianapolis	Marion
McVey, Clarence A. (S)	Hammond	Lake
McWilliams, William B.	Liberty	Wayne-Union
Mead, Clarence H. (S)	Bluffton	Wells
Mead, Frank E.	La Porte	La Porte
Mealey, John, Jr.	Indianapolis	Marion
Medcalf, Norman L. (S)	Lamar	Spencer
Megenhardt, Dennis S.	Indianapolis	Marion
Mehne, Richard G.	Brazil	Clay
Meier, Donald W.	Bluffton	Wells
Meikle, Louise J. (S)	W. Lafayette	Tippecanoe
Meiks, Lyman T.	Indianapolis	Marion
Meiser, Robert D.	Huntington	Huntington
Meissel, Robert	Terre Haute	Vigo
Meister, Doris (S)	Anderson	Madison
Melin, John R.	Indianapolis	Marion
Mendelson, Stanley M.	Kokomo	Howard
Mendez, Carlos	Elkhart	Elkhart
Mensch, James R.	Fort Wayne	Allen
Mentendiek, Maurice H.	Indianapolis	Marion
Mercer, Samuel R.	Fort Wayne	Allen
Meredith, Elwood J.	Richmond	Wayne-Union
Mericle, Earl W.	Indianapolis	Marion
Merrell, Paul	Indianapolis	Marion
Merritt, A. Donald	Indianapolis	Marion
Merritt, Doris H.	Indianapolis	Marion
Mershon, Jack B.	Indianapolis	Marion
Mertz, Henry O. (S)	Nokomis, Fla.	Marion
Mertz, John H. O.	Indianapolis	Marion
Messer, Frank W.	Kendallville	Noble
Metcalfe, Grant E.	South Bend	St. Joseph
Meyer, Claude J.	Jeffersonville	Clark
Meyer, Hans	Westville	La Porte
Meyer, Herman A.	Fort Wayne	Allen
Meyer, Theodore O.	Fort Wayne	Allen
Meyn, Werner P.	Terre Haute	Vigo
Michael, Isaac E.	Indianapolis	Marion
Michael, Robert L.	Kokomo	Howard
Michaelis, Stephen C.	Fort Wayne	Allen
Middleton, Harvey N.	Indianapolis	Marion
Middleton, Ramona J.	Elkhart	Elkhart
Middleton, Thomas O	Bloomington	Owen-Monroe
Miklozek, John E.	Terre Haute	Vigo
Milan, Joseph F.	Bloomington	Owen-Monroe
Milan, Shisachki D.	East Chicago	Lake
Miller, Albert J.	Lafayette	Tippecanoe
Miller, Arthur H. (S)	Russiaville	Howard
Miller, Dan T. (S)	Fowler	Benton
Miller, Don E.	Fort Wayne	Allen
Miller, Donald C.	Cedar Lake	Lake
Miller, Donald G.	Middlebury	Elkhart
Miller, Edward D.	Fort Wayne	Allen
Miller, Frank H.	Indianapolis	Marion
Miller, H. Allison	Marion	Grant
Miller, H. Paul	Fort Wayne	Allen
Miller, Harold E.	Seymour	Jackson-Jennings
Miller, Harold L.	Richmond	Wayne-Union
Miller, Hugh A.	Elkhart	Elkhart
Miller, James	Wakarusa	Elkhart
Miller, James C.	Greensburg	Decatur
Miller, Jerry A.	LaGrange	LaGrange
Miller, Jerry R.	Indianapolis	Marion
Miller, John D.	Indianapolis	Marion
Miller, John M.	Bloomington	Owen-Monroe
Miller, Joseph A.	Oaklandon	Hancock
Miller, Kenneth D.	Woodburn	Allen
Miller, LaVerne B.	Evansville	Vanderburgh
Miller, Mahlon F.	Fort Wayne	Allen
Miller, Maurice	Michigan City	La Porte
Miller, Milton J.	Evansville	Vanderburgh
Miller, Milo K. (S)	South Bend	St. Joseph
Miller, Orval J.	Fort Wayne	Allen
Miller, Raleigh S.	Indianapolis	Marion
Miller, Ray D.	Martinsville	Morgan
Miller, Richard C.	Shelbyville	Shelby
Miller, Richard H.	Fort Wayne	Allen
Miller, Robert B.	Fort Wayne	Allen
Miller, Robert J.	Paragon	Morgan
Miller, Roland E.	Lafayette	Tippecanoe
Miller, Roscoe E.	Indianapolis	Marion
Miller, Samuel T. (S)	Elkhart	Elkhart
Miller, Virgil C.	Akron	Fulton
Miller, Wayne S.	Flint, Mich.	Huntington
Miller, William A.	Hagerstown	Henry
Miller, William J.	Fort Wayne	Allen
Milleson, Ann L. M.	Terre Haute	Vigo
Millis, Arthur B.	Richmond	Wayne-Union
Millis, Samuel C.	Crawfordsville	Montgomery
Mills, Fred E.	Evansville	Vanderburgh
Mills, John F.	Wabash	Wabash
Milne, Walter S.	Michigan City	La Porte
Milos, Robert J.	Gary	Lake
Milroy, Robert A.	Bluffton	Wells
Minczewski, Richard C.	Gary	Lake
Minich, William G.	Newport	Parke-Vermillion
Minick, Linus J.	Churubusco	Whitley
Mininger, Edward P.	Elkhart	Elkhart
Mino, Robert A.	Evansville	Vanderburgh
Mintz, Alfred M.	Hammond	Lake
Misch, William	Cedar Lake	Lake
Mishkin, Irving	Elkhart	Elkhart
Mishler, Joe B.	Pierceton	Whitley
Mitchell, John R.	Terre Haute	Vigo
Mitchell, George H.	Indianapolis	Marion
Mitchell, George L. (S)	Smithville	Owen-Monroe
Mitchell, Georgia B.	Gary	Lake
Mitman, Floyd B.	Huntington	Huntington
Mladick, Edward A.	Michigan City	LaPorte
Moak, Glenn D.	Indianapolis	Marion
Moats, Carl F.	Fort Wayne	Allen
Moats, George E. (S)	Fort Wayne	Allen
Mock, Harry E., Jr.	Franklin	Johnson
Modisett, Jackson W.	Madison	Jefferson-Switzerland
Modisett, Marcella S.	Madison	Jefferson-Switzerland
Modjeski, Joseph R.	Hammond	Lake
Moehlenkamp, Chas. E.	Evansville	Vanderburgh
Moeller, Victor C.	Fort Wayne	Allen
Moenning John E.	Indianapolis	Marion
Moheban, Joseph	Shelbyville	Shelby
Mohler, Floyd W.	Columbus	Bartholomew-Brown
Molengraft, Cornelius J.	Gary	Lake
Moleski, Walter L.	Griffith	Lake
Monar, Michael	Rockport	Spencer
Moneyhun, James E.	Anderson	Madison
Monroe, F. Bruce	Crown Point	Lake
Montes, Herminio Y.	Hammond	Lake
Montgomery, Lall G.	Muncie	Delaware-Blackford
Montgomery, Ralph F.	Indianapolis	Marion
Montgomery, Samuel B. (S)	Cynthiana	Posey
Montgomery, William F.	Indianapolis	Marion

Name	City	County
Moon, Charles E.	Center Point	Clay
Moore, Donald F.	Indianapolis	Marion
Moore, Harold T.	Indianapolis	Marion
Moore, Jack C.	Muncie	Delaware-Blackford
Moore, Martha	Madison	Jefferson-Switzerland
Moore, Richard B.	St. Paul, Minn.	Marion
Moore, Robert G.	Vincennes	Knox
Moore, Thomas C.	Muncie	Delaware-Blackford
Moore, Will C. (S)	Muncie	Delaware-Blackford
Moore, William G.	Ft. Hood, Texas	Marion
Moosey, Louis	Union Mills	La Porte
Moravec, Arthur E.	Fort Wayne	Allen
Morchan, Samuel	Indianapolis	Marion
Morey, Edwin E.	Fort Wayne	Allen
Morgan, Margaret E.	Indianapolis	Marion
Morgan, Milton M.	Fort Wayne	Allen
Moriarty, John R.	Indianapolis	Marion
Morrical, Russell J.	Logansport	Cass
Morris, Hyman R.	Gary	Lake
Morris, Jean W.	Muncie	Delaware-Blackford
Morris, Robert A.	Anderson	Madison
Morris, Warren V.	Monticello	White
Morrison, George G.	Portland	Jay
Morrison, George G., Jr.	Lawrenceburg	Dearborn-Ohio
Morrison, James T.	Greensburg	Decatur
Morrison, Lewis E.	Indianapolis	Marion
Morrison, William R. (S)	Kokomo	Howard
Morrow, Dean H.	Bethesda, Md.	Marion
Morrow, Robert J.	Bedford	Lawrence
Morse, Arthur S.	E. Riverdale, Maryland	Delaware-Blackford
Mortenson, Leland J.	Fort Wayne	Allen
Morton, David P.	Westville	La Porte
Morton, Joseph L.	Indianapolis	Marion
Morton, Walter P.	Indianapolis	Marion
Moser, Elmer B. (S)	Windfall	Tipton
Moser, Rollin H.	Indianapolis	Marion
Moses, George E.	Worthington	Greene
Moses, Robert E.	Worthington	Greene
Moss, Bobby L.	Indianapolis	Marion
Moss, Harlan B.	Indianapolis	Marion
Moss, Herschel C.	Indianapolis	Marion
Moss, Mavor J.	Yorktown	Delaware-Blackford
Moswin, Jack A.	Gary	Lake
Mothersill, Mark H. (S)	Indianapolis	Marion
Mott, Cassell A.	South Bend	St. Joseph
Mott, William H.	Gary	Lake
Moulton, Lillian G.	Evansville	Vanderburgh
Mount, Mathias S.	Bloomfield	Greene
Mount, William M.	Lafayette	Tippecanoe
Mountain, Francis B.	Connersville	Fayette-Franklin
Mouser, Robert W.	Indianapolis	Marion
Mudd, Joseph P.	Clarksville	Clark
Muelchi, Adeline F.	Evansville	Vanderburgh
Mullen, James B.	Indianapolis	Marion
Mueller, Edwin C.	LaPorte	LaPorte
Mueller, Hilbert M.	South Bend	St. Joseph
Mueller, Lawrence W.	Fort Wayne	Allen
Muhleman, Charles E.	La Porte	La Porte
Muller, Lullus P.	Indianapolis	Marion
Muller, Paul F.	Indianapolis	Marion
Muller, Victor H.	Indianapolis	Marion
Murdock, Harvey L. (S)	Fort Wayne	Allen
Murphy, Edward U.	Evansville	Vanderburgh
Murphy, Eugene C.	South Bend	St. Joseph
Murphy, Joseph F.	Lansing, Ill.	Lake
Murphy, Josephine F.	South Bend	St. Joseph
Murphy, Maurice G. (S)	Morgantown	Morgan
Murray, Ernest C.	Kokomo	Howard
Murray, James S.	Camarillo, Calif.	Marion
Murray, William E.	New Castle	Henry
Musselman, Glen G.	Terre Haute	Vigo
Musser, A. Wendell	Ft. Bragg, N. C.	Marion
Myers, Charles W. (S)	Indianapolis	Marion
Myers, Philip R.	South Bend	St. Joseph
Myers, Roy V. (S)	West Palm Beach, Fla.	Marion

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Nagan, Robert F.	Indianapolis	Marion
Nash, Justin R.	Albion	Noble
Nason, Robert A.	Garrett	De Kalb
Navin, Hugh K.	Fortville	Hancock
Navarre, Vincent J.	Munster	Lake
Nay, Ernest O. (S)	Terre Haute	Vigo
Nay, Richard M.	Indianapolis	Marion
Neal, Leonard W.	Hammond	Lake
Neale, Alfred E.	Anderson	Madison
Nedelkoff, Bogdan	New Albany	Floyd
Need, David J.	Indianapolis	Marion
Need, Louis T.	Indianapolis	Marion
Need, Richard L.	Indianapolis	Marion
Neher, John L.	South Bend	St. Joseph
Neidballa, Edward G.	Bristol	Elkhart
Neifert, Noel L.	Tell City	Perry
Nelson, Carl A.	West Lebanon	Fountain-Warren
Nelson, Dudley	Chandler	Warrick
Nelson, F. Dale	South Bend	St. Joseph
Nelson, Harold E.	Muncie	Delaware-Blackford
Nelson, John W.	Morgantown, W. Va.	Marion
Nelson, Raymond E.	South Bend	St. Joseph
Nelson, Walfred A.	Gary	Lake
Nenneker, Henry (S)	Evansville	Vanderburgh
Nesbit, Leonard L.	Anderson	Madison
Nester, Henry G.	Indianapolis	Marion
Netherton, Clyde R. (S)	Chalmers	Tippecanoe
Neudorff, Louis G.	Terre Haute	Vigo
Neukamp, Frank H.	Connersville	Fayette-Franklin
Neumann, Kenneth O.	Lafayette	Tippecanoe
Newby, Eugene	Sheridan	Hamilton
Newcomb, William K.	Royal Center	Cass
Newland, Arthur E.	Bedford	Lawrence
Newman, Alvin E.	Ft. Lauderdale, Fla.	Vanderburgh
Newman, Daniel M.	Indianapolis	Marion
Newnum, Raymond L.	Evansville	Vanderburgh
Newsome, C. K.	Evansville	Vanderburgh
Niccum, Warren L.	Columbia City	Whitley
Nicholas, Dennis J.	Indianapolis	Marion
Nichols, Anne Sackett	Greencastle	Putnam
Nichols, Robert J.	Vincennes	Knox
Nicholson, Raymond W.	Evansville	Vanderburgh
Nicosia, John B.	East Chicago	Lake
Nie, Louis W.	Indianapolis	Marion
Niedermayer, Alfred J.	Evansville	Vanderburgh
Nigh, Rufus M.	Fairland	Shelby
Nill, John H.	Fort Wayne	Allen
Nixon, Byron	Farmland	Randolph
Noblitt, James S. (S)	Rockville	Parke-Vermillion
Nodinger, Louis	Hammond	Lake
Noe, William R.	Bedford	Lawrence
Nohl, John M.	Indianapolis	Marion
Nolan, Gerald R.	Fort Wayne	Allen
Nolin, Richard T.	Indianapolis	Marion

Name	City	County
Nolt, Ernest V. (S)	Columbia City	Whitley
Nolting, Henry F. (S)	Indianapolis	Marion
Nonte, Leo R.	Evansville	Vanderburgh
Noonan, Leo C.	Portage	Porter
Norman, William H.	Indianapolis	Marion
Norris, Allen A. (S)	Elkhart	Elkhart
Norris, Ernest B.	Culver	Marshall
Norris, Marvin G.	Rushville	Rush
Norris, Max S.	Indianapolis	Marion
Norton, Harold J.	Columbus	Bartholomew-Brown
Norton, Horace O.	Washington	Daviess-Martin
Nourse, Myron H.	Indianapolis	Marion
Noveroske, Richard J.	Evansville	Marion
Novy, Charles A.	Garrett	De Kalb
Nugen, Harold	Auburn	De Kalb
Nugent, Edwin J.	Indianapolis	Marion
Nurnberger, John I.	Indianapolis	Marion
Nutter, Wyndham H.	Rushville	Rush

O

Oak, David D., Sr. (S)	LaCrosse	La Porte
Oak, David D., Jr.	Hanna	La Porte
Oberlander, Seymour	Gary	Lake
O'Brian, Earl J.	Indianapolis	Marion
O'Brian, John F.	Fort Wayne	Allen
O'Brien, Francis E.	Rensselaer	Jasper-Newton
O'Brien, Raymond J.	Michigan City	La Porte
O'Bryan, Richard B.	Columbus	Bartholomew-Brown
Oca, Clemente F.	Jeffersonville	Clark
Ochsner, Harold C.	Indianapolis	Marion
Ochsner, Harold C. Jr.	Offutt AFB, Nebr.	Marion
Ockerman, Kenneth R.	Rensselaer	Jasper-Newton
Offutt, Andrew C.	Indianapolis	Marion
Ogle, Robert W.	Greenwood	Johnson
Olcott, Charles W.	Aurora	Dearborn-Ohio
Oldag, George E.	Elwood	Madison
Oliphant, Frank W.	Mount Vernon	Posey
Oliphant, Wilmer G.	Terre Haute	Vigo
Olivio, Marciano T.	Gary	Lake
Olson, Donald T.	South Bend	St. Joseph
Olson, Kenneth L.	South Bend	St. Joseph
Olson, Leslie D.	Gary	Lake
Olson, William H.	Michigan City	La Porte
Olvey, Ottis N.	Indianapolis	Marion
Omstead, Milton	Petersburg	Pike
Omstead, Trevalyn W.	Huntington	Huntington
O'Neill, Martin J.	Valparaiso	Porter
Onorato, Joseph J.	Lafayette	Tippecanoe
Onyett, Harold R.	Greenwood	Johnson
Orders, Clarke E. (S)	Indianapolis	Marion
Oren, William F.	South Bend	St. Joseph
Ormiston, Michael W.	Long Beach, Calif.	Marion
Ornelas, Joseph P.	Gary	Lake
O'Rourke, Carroll	Fort Wayne	Allen
Orr, W. Robert	South Bend	St. Joseph
Osborne, John V.	Muncie	Delaware-Blackford
Oster, Jack H.	Westville	La Porte
Ostheimer, George	Martinsville	Morgan
Oswald, Robert H.	Evansville	Vanderburgh
Oswalt, James T.	Mitchell	Lawrence
Otten, Claude F.	Indianapolis	Marion
Otten, Ralph E.	Darlington	Montgomery
Overley, Ross A.	Indianapolis	Marion
Overley, Toner M., Jr.	Indianapolis	Marion
Overpeck, Charles	Greensburg	Decatur
Overpeck, George H.	Alexandria	Madison
Overshiner, Lyman (S)	Columbus	Bartholomew-Brown
Owen, John E.	Indianapolis	Marion
Owen, Margaret T.	Bloomington	Owen-Monroe
Owen, Thomas F.	Alexandria	Madison
Owens, Thomas R. (S)	Muncie	Delaware-Blackford
Owens, Tracy C.	Indianapolis	Marion
Owsley, Guy A.	Hartford City	Delaware-Blackford
Oyer, John H.	Fort Wayne	Allen

P

Pace, Jerome V.	Indianapolis	Parke-Vermillion
Paff, William A.	Elkhart	Elkhart
Pagedas, Tom C.	Indianapolis	Marion
Paine, George E.	Elkhart	Elkhart
Painter, Donald S.	Fort Wayne	Allen
Painter, Lowell W.	Winchester	Randolph
Pairitz, Frank D.	South Bend	St. Joseph
Palmer, Barron M. F.	Hammond	Lake
Palmer, Charman F.	Indianapolis	Marion
Palmer, Harley P.	Indianapolis	Marion
Palmer, Robert M.	Indianapolis	Marion
Palmer, Robert W.	Indianapolis	Marion
Panares, Solomon V.	Hammond	Lake
Pancost, Vernon K.	Elkhart	Elkhart
Pandolfo, Harry	Indianapolis	Marion
Panos, Constantine O.	Bluffton	Wells
Pappas, Eddie T.	Gary	Lake
Paras, Jose L.	Batesville	Ripley
Paris, Durward W.	Kokomo	Howard
Paris, John M.	New Albany	Floyd
Park, Byron J.	Richmond	Wayne-Union
Parker, Carey B.	Fort Wayne	Allen
Parker, Carl B.	Wingate	Montgomery
Parker, E. Camille	Logansport	Cass
Parker, Francis W., Jr.	Logansport	Cass
Parker, George F., Jr.	Indianapolis	Marion
Parker, Harry C. (S)	Hobart	Lake
Parker, John B.	Versailles	Ripley
Parker, John C.	Goodland	Jasper-Newton
Parker, John F.	Indianapolis	Marion
Parker, Portia	Indianapolis	Marion
Parks, George O.	Hartford City	Delaware-Blackford
Parks, Herbert E.	Houston, Texas	Marion
Parmenter, Harry B.	Vincennes	Knox
Parr, Robert L.	Indianapolis	Marion
Parratt, Louis W.	Gary	Lake
Parrish, Richard K.	Decatur	Adams
Parrot, Donald J.	Fort Wayne	Allen
Parshall, Dale B.	Elkhart	Elkhart
Parsons, Robert L.	South Bend	St. Joseph
Pascuzzi, Chris A.	South Bend	St. Joseph
Paskind, Jacob	Indianapolis	Marion
Pastor, Julius W.	Evansville	Vanderburgh
Patrick, Glenn B.	Elkhart	Elkhart
Patterson, Jack W.	Fort Wayne	Allen
Patterson, William K.	Anderson	Madison
Pattison, John D.	Marion	Grant
Paul, Eudell G.	Munster	Lake
Paul, Leonard G.	Michigan City	La Porte
Pauly, Leonard R.	Fort Wayne	Allen
Paulissen, George T.	Indianapolis	Marion
Pauszek, Thomas B.	South Bend	St. Joseph
Pavlick, Theodore J.	Evansville	Vanderburgh
Payne, Arthur C.	East Chicago	Lake
Paynter, Morris B.	Southport	Marion
Paynter, William	Pekin	Washington
Paz, Luis	Shelbyville	Shelby
Peacock, Norman F.	Crawfordsville	Montgomery
Peacock, Robert C.	Muncie	Delaware-Blackford

Name	City	County
Pearce, Roy V.	Terre Haute	Vigo
Pearcy, Marcene	Marion	Grant
Peare, Reeve B.	Huntington	Huntington
Pearson, Huey L.	Fort Wayne	Allen
Pearson, John S.	Indianapolis	Marion
Pearson, Lyman R.	Clearwater, Fla.	Marion
Pearson, William E.	Wabash	Wabash
Pebworth, Aubrey C. (S)	Indianapolis	Marion
Peck, Edward A.	Hammond	Lake
Peck, Franklin B., Jr.	Indianapolis	Marion
Peck, Franklin B., Sr.	Monticello	Marion
Peck, James F.	Princeton	Gibson
Peiffer, Geraldine M.	Hammond	Lake
Peirce, James D.	Indianapolis	Marion
Pemberton, Jack J.	Evansville	Vanderburgh
Penn, Robert A.	East Gary	Lake
Pentecost, Paul S.	Richmond	Wayne-Union
Perdomo, Octavio J.	East Chicago	Lake
Perkins, Powell L.	Kokomo	Howard
Perlov, Sylvan H.	Indianapolis	Marion
Permer, Erwin	Indianapolis	Marion
Perrin, Kermit F.	Fort Wayne	Allen
Perry, Frederic G.	Fort Wayne	Allen
Person, Theodore C.	Veedersburg	Fountain-Warren
Peters, Elmer E.	Brookville	Fayette-Franklin
Peterson, Deward D.	Indianapolis	Marion
Peterson, Joel A.	West Lafayette	Tippecanoe
Peterson, Roland L.	Plymouth	Marshall
Petitjean, Harold G.	Haubstadt	Gibson
Petranoff, Theodore V. (S)	Indianapolis	Marion
Petrass, Andrew (S)	South Bend	St. Joseph
Petrich, Peter R.	Attica	Fountain-Warren
Petry, T. Neal	Delphi	Carroll
Pettijohn, Fred L. (S)	Indianapolis	Marion
Peyton, Frank W.	Lafayette	Tippecanoe
Pfaff, Dudley A.	Indianapolis	Marion
Pfeifer, James M.	Lawrenceburg	Dearborn-Ohio
Pfuetze, Max	Logansport	Cass
Phares, Robert W.	Kokomo	Howard
Phelps, Stephen R.	South Bend	St. Joseph
Phelps, William J.	Fort Wayne	Allen
Philbert, Richard N.	Redding, Calif.	Allen
Philbrook, Seth S.	La Porte	La Porte
Phillips, David L.	Indianapolis	Marion
Phillips, John F.	Bluffton	Wells
Phillips, John H.	Michigan City	LaPorte
Phipps, Elwood B.	Logansport	Cass
Phipps, Leland K.	Union City	Randolph
Pickett, Merle E.	Fort Wayne	Allen
Pickett, Robert D.	Indianapolis	Marion
Pierce, Emmett, Jr.	Indianapolis	Marion
Pierce, Fredrick H.	Anderson	Madison
Pierce, Gene S.	New Albany	Floyd
Pierce, Raymond O.	Indianapolis	Marion
Pierson, Pearl H.	Silver Lake	Kosciusko
Pierson, Robert H.	Crawfordsville	Montgomery
Pierson, Thomas A.	New Palestine	Hancock
Pietz, David G.	Bluffton	Wells
Pike, Warren H.	Hobart	Lake
Pilcher, Jack E.	Indianapolis	Marion
Pilecki, Peter J.	Michigan City	La Porte
Pilot, Jean	Hammond	Lake
Pippenger, Joseph I.	Muncie	Delaware-Blackford
Pippenger, Wayne G.	Muncie	Delaware-Blackford
Pirkle, Hubert B.	Rockville	Parke-Vermillion
Pitkin, McKendree C.	Martinsville	Morgan
Pittman, John N.	Indianapolis	Marion
Pizzo, Anthony	Bloomington	Owen-Monroe
Plain, George	South Bend	St. Joseph
Plank, C. Robert	Michigan City	La Porte
Plasterer, Edward D.	Richmond	Wayne-Union
Platis, James M.	Indianapolis	Marion
Pletcher, William D.	Elkhart	Elkhart
Ploetner, Edward J.	Jasper	Dubois
Ploughe, Ralph R.	Elwood	Madison
Poehler, Frederick C.	Claypool	Kosciusko
Polhemus, Warren C.	Anderson	Madison
Polite, Nicholas L.	Whiting	Lake
Poncher, John R.	Evansville	Vanderburgh
Pontius, Edwin E.	Indianapolis	Marion
Ponczek, Edward J.	Monroeville	Allen
Poolitsan, George C.	Bloomington	Owen-Monroe
Popp, Milton F.	Fort Wayne	Allen
Popplewell, Arvine G.	Indianapolis	Marion
Poracky, Bernard F.	Gary	Lake
Porro, Francis W.	Evansville	Vanderburgh
Porter, Carl M.	Jasonville	Greene
Porter, Edward A. (S)	Westport	Decatur
Porter, George S.	Richmond	Wayne-Union
Porter, Jack	Lebanon	Boone
Porter, Robert A.	Westport	Decatur
Portney, Fred R.	Munster	Lake
Portteus, Walter L.	Franklin	Johnson
Poston, Clement L.	Laurel	Fayette-Franklin
Potter, Richard M.	Ridgeville	Randolph
Powell, J. Paxton	Marion	Grant
Powell, M. Jack	Fort Wayne	Allen
Powell, Richard C.	Indianapolis	Marion
Prather, Philip E.	Kokomo	Howard
Pratt, Ralph M., Jr.	Madison	Jefferson-Switzerland
Predd, Adolph C.	La Porte	La Porte
Premuda, Franklin F.	Hammond	Lake
Prenatt, Francis	Madison	Jefferson-Switzerland
Prentiss, Nelson H.	Oteen, N. C.	Allen
Present, Julian	Evansville	Vanderburgh
Pribble, Robert H.	Indianapolis	Marion
Price, Ambrose M.	Marion	Grant
Price, Douglas W.	Nappanee	Elkhart
Price, Francis W.	Indianapolis	Marion
Price, James O.	Indianapolis	Marion
Price, Shirley G.	Evansville	Vanderburgh
Price, Walter S.	Indianapolis	Marion
Priddy, Marvin E.	Fort Wayne	Allen
Priebe, Fred H.	Indianapolis	Montgomery
Proudfit, Charles H.	South Bend	St. Joseph
Province, Oran A.	Franklin	Johnson
Province, William D.	Franklin	Johnson
Pruitt, J. Edward	Gary	Lake
Pryor, Richard C.	Indianapolis	Marion
Pu, Pin H.	Terre Haute	Vigo
Pugh, Willis L.	Evansville	Vanderburgh
Pulskamp, Bertrand H.	Wolcottville	Noble
Purcell, Richard J.	Griffith	Lake
Puterbaugh, Karl E.	Albany	Delaware-Blackford
Pyle, Harold D.	South Bend	St. Joseph

Q

Quarles, E. Bryan	Bloomington	Owen-Monroe
Quick, William J.	Muncie	Delaware-Blackford
Quickel, Daniel S. (S)	Anderson	Madison
Quigley, Joseph B.	Indianapolis	Marion
Quilty, Thomas J.	Goshen	Elkhart
Quitasol, Zoilo A. Jr.	Michigan City	La Porte

R

Rabb, Aaron	Indianapolis	Marion
Rabb, Frank M.	Indianapolis	Marion
Rabb, Harry S.	Indianapolis	Marion
Raber, Robert M.	Indianapolis	Marion

Name	City	County
Rader, George S.	Indianapolis	Marion
Radigan, Leo R.	Gary	Lake
Radpour, Shokri	Kokomo	Howard
Radziewicz, Arthur R.	Chicago, Ill.	Warrick
Rafalski, Thomas A.	Indianapolis	Marion
Ragan, William D.	Indianapolis	Marion
Ralston, John D.	Indianapolis	Marion
Ramage, Walter F.	Beech Grove	Marion
Ramey, John W. (S)	Kokomo	Howard
Ramker, Daniel T.	Hammond	Lake
Ramos, Alfonso	Gary	Lake
Ramos, John	East Chicago	Lake
Ramsdell, Glen A.	Richmond	Wayne-Union
Ramsey, Frank B.	Indianapolis	Marion
Ramsey, Hugh S.	Bloomington	Owen-Monroe
Ranck, Benjamin	Columbus	Bartholomew-Brown
Raney, Ben B.	Linton	Greene
Rang, A. A. (S)	Washington	Daviess-Martin
Rang, Robert H.	Washington	Daviess-Martin
Rank, William B.	Fort Wayne	Allen
Rapp, George F.	Columbia, S. Carolina	Marion
Rasch, George C., Jr.	Hammond	Lake
Rasmussen, Ruth F.	South Bend	St. Joseph
Ratcliff, Frank W.	Lafayette	Tippecanoe
Ratcliffe, Albert W.	Evansville	Vanderburgh
Rau, Charles A.	Columbus	Bartholomew-Brown
Rauh, Robert A.	Wabash	Wabash
Rausch, Norman W.	Angola	Steuben
Rawlins, Carolyn M.	Hammond	Lake
Rawls, George H.	Indianapolis	Marion
Ray, Carl S.	Warren	Huntington
Ray, Herbert A. (S)	Fort Wayne	Allen
Raymundo, Vivencio F.	Attica	Fountain-Warren
Rea, Ralph L.	Hyattsville, Md.	Marion
Read, John E.	Chesterton	Porter
Reck, John L. (S)	Sheridan	Hamilton
Records, Arthur W.	Franklin	Johnson
Records, John M.	Franklin	Johnson
Reed, Donald W.	Culver	Marshall
Reed, Edsel S.	Jeffersonville	Clark
Reed, Edgar A.	Warsaw	Kosciusko
Reed, John	Hobart	Lake
Reed, John D.	Fort Wayne	Allen
Reed, Nelle C. (S)	Michigan City	La Porte
Reed, Philip B.	Indianapolis	Marion
Reed, Robert C.	Terre Haute	Vigo
Reed, Robert F.	Mishawaka	St. Joseph
Reed, Robert G., Jr.	Plymouth	Marshall
Reed, Roger R.	Anderson	Madison
Reed, Roland R.	Whiting	Lake
Reeder, Henry H.	Jeffersonville	Clark
Rees, Russel C.	Indianapolis	Marion
Reese, Jay S.	Martinsville	Morgan
Regan, George L.	Sellersburg	Clark
Reibel, Donald B.	Beaufort, So. Carolina	Marion
Reich, Clarence E.	Evansville	Vanderburgh
Reid, Charles A.	Indianapolis	Marion
Reid, Donald B.	Columbia City	Whitley
Reid, James D.	Marion	Grant
Reid, Robert M.	Columbus	Bartholomew-Brown
Reid, Robert W. (S)	Union City	Randolph
Reilly, Eva Ferro	Beech Grove	Marion
Reilly, James F.	Vincennes	Knox
Reilly, Richard W.	Crete, Ill.	Lake
Reisler, Simon (S)	Indianapolis	Marion
Reitman, Paul H.	East Chicago	Lake
Remich, Antone C.	Hammond	Lake
Renbarger, Lester L.	Marion	Grant
Rendel, Donald T.	Hammond	Lake
Rendel, Harold E.	Mexico	Miami
Reno, Edward C.	Plymouth	Marshall
Repay, Walter A.	Hammond	Lake
Reppert, Roland L.	Decatur	Adams
Ress, Gene E.	Fort Eustis, Va.	Perry
Reuter, John W.	Indianapolis	Marion
Reynolds, James S.	Gary	Lake
Reynolds, Ralph E.	Middletown	Madison
Reynolds, Richard J.	Terre Haute	Vigo
Rhamy, Arthur P.	Marion	Grant
Rhamy, Donald E.	Indianapolis	Grant
Rhamy, Robert K.	Indianapolis	Marion
Rhea, Kenneth E.	Indianapolis	Marion
Rheinheimer, Floyd L.	Milford	Elkhart
Rhind, Alexander W.	Hammond	Lake
Rhodes, Alfred K.	Lawrenceburg	Dearborn-Ohio
Rhodes, Theodore D.	Nokomis, Fla.	Marion
Rhorer, Herbert M. (S)	Kokomo	Howard
Rhorer, John G.	Marion	Grant
Rhynearson, Hal R.	Fortville	Hancock
Rice, Frederic A.	Indianapolis	Marion
Rice, Raymond D.	Indianapolis	Marion
Rice, Raymond M.	Indianapolis	Marion
Rich, Norval	Decatur	Adams
Richard, Norman F.	Shelbyville	Shelby
Richards, Edgar E.	Russellville	Montgomery
Richardson, Charles L.	Rochester	Fulton
Richardson, Joseph D.	Rochester	Fulton
Richardson, Joseph H.	Marion	Grant
Richardson, Thad T.	Indianapolis	Marion
Richart, James V.	Terre Haute	Vigo
Richer, Orville H.	Warsaw	Kosciusko
Richmond, Harold W.	Columbus	Bartholomew-Brown
Richter, Arthur B.	Indianapolis	Marion
Richter, John C.	La Porte	La Porte
Richter, Samuel	Gary	Lake
Ricketts, Joseph W. (S).	Orman Beach, Fla.	Marion
Ridgeway, Ora W. (S)	Indianapolis	Marion
Ridgway, Alton H.	Lapel	Madison
Ridolfo, Anthony S.	Indianapolis	Marion
Rieger, I. Taylor	Bloomington	Owen-Monroe
Rietman, H. Jerome	Evansville	Vanderburgh
Rifner, Eugene S.	Van Buren	Grant
Rigg, John F.	Miami Shores, Fla.	Marion
Riggs, Floyd C.	Terre Haute	Vigo
Rigley, Edward L.	South Bend	St. Joseph
Riley, H. S.	Madison	Jefferson-Switzerland
Rimel, James F.	Plymouth	Marshall
Riner, Jack K.	Indianapolis	Marion
Rinne, John I. (S)	Lapel	Madison
Riordan, John F.	Gary	Lake
Ripley, John W.	Seymour	Jackson-Jennings
Rissing, Walter J.	Fort Wayne	Allen
Ritchey, James O.	Indianapolis	Marion
Ritchie, William D.	Evansville	Vanderburgh
Rittelmeyer, Louis F., Jr.	Evansville	Vanderburgh
Ritteman, George W.	Franklin	Johnson
Ritter, Wayne L.	Indianapolis	Marion
Ritz, Albert S.	Evansville	Vanderburgh
Rivers, Glynn A.	Muncie	Delaware-Blackford
Robb, John A.	Indianapolis	Marion
Roberts, Billy J.	South Bend	St. Joseph
Robertson, Addis N.	New Albany	Floyd
Robertson, David W. (S)	Deputy	Jefferson-Switzerland
Robertson, James S.	Plymouth	Marshall

Name	City	County
Robertson, Ray B.	Indianapolis	Marion
Robertson, William C.	Chesterton	Porter
Robertson, William S.	Spiceland	Henry
Robinson, Earle U.	Evansville	Vanderburgh
Robinson, Frank C. (S)	Newport Beach, Calif.	Marion
Robinson, Nan	New Albany	Floyd
Robinson, Walter K.	Gary	Lake
Robinson, William H.	Mitchell	Lawrence
Roby, Alma L.	Jeffersonville	Clark
Rochlin, Isidore	Indianapolis	Marion
Rockey, Noah A. (S)	Fort Wayne	Allen
Rodin, Herman H.	South Bend	St. Joseph
Roesch, Ryland	Indianapolis	Marion
Roeske, Nancy A.	Indianapolis	Marion
Rogers, Donald L.	Indianapolis	Marion
Rogers, Evered E.	Auburn	De Kalb
Rogers, Otto F.	Bloomington	Owen-Monroe
Rogers, R. Shirrell	West Terre Haute	Vigo
Rogers, Thomas P.	La Jolla, Calif.	Marion
Rohn, Robert J.	Indianapolis	Marion
Rohrer, Bryce B.	Walkerton	La Porte
Rohrer, James R.	Elnora	Daviess-Martin
Roll, John W.	Indianapolis	Marion
Roll, William A.	Marion	Grant
Roller, Charles W. (S)	Indianapolis	Marion
Rollins, Thomas K.	Bloomington	Owen-Monroe
Romberger, Floyd T., Jr.	Indianapolis	Marion
Romero, Plinio	East Chicago	Lake
Rommel, Clarence H.	W. Lafayette	Tippecanoe
Roose, Lisle W.	Nappanee	Elkhart
Ropp, Eldon R. (S)	Oakland City	Gibson
Ropp, Harold E.	New Harmony	Posey
Rosato, Edward J.	Evansville	Vanderburgh
Rosenak, Bernard D.	Indianapolis	Marion
Rosenbaum, Irving, Jr.	Indianapolis	Marion
Rosenbaum, Lloyd E.	Anderson	Madison
Rosenberg, Gabriel J.	Indianapolis	Marion
Rosenblatt, Bernard B.	Evansville	Vanderburgh
Rosenbloom, Philip J.	Gary	Lake
Rosenheimer, George M.	South Bend	St. Joseph
Rosenthal, Carl	Hammond	Lake
Rosenwasser, Jacob	Mishawaka	St. Joseph
Roser, Arthur J.	Fort Wayne	Allen
Rosevear, Henry J.	Hammond	Lake
Ross, Alexander T.	Indianapolis	Marion
Ross, Ben R.	Bloomington	Owen-Monroe
Ross, David E., Jr.	Gary	Lake
Ross, Glenn E.	Washington	Daviess-Martin
Ross, Guy E.	Anderson	Madison
Ross, Harry P.	Richmond	Wayne-Union
Ross, James B.	Bloomington	Owen-Monroe
Rossiter, Dudley L.	Fort Wayne	Allen
Roth, Bertram S.	Indianapolis	Marion
Roth, James R.	Columbia City	Noble
Roth, Leo	Gary	Lake
Roth, Melvin I.	Gary	Lake
Rothberg, Maurice	Fort Wayne	Allen
Rothrock, Philip W.	Lafayette	Tippecanoe
Rotman, Harry G.	Jasonville	Greene
Rotman, Sam I.	Jasonville	Greene
Rouen, Robert	Elkhart	Elkhart
Rougraff, Maurice E.	Indianapolis	Marion
Rourke, Robert F.	Terre Haute	Vigo
Rousseau, John W.	Fort Wayne	Allen
Row, D. Hamilton	Indianapolis	Marion
Row, George S.	Osgood	Ripley
Row, Perrie Q.	Hammond	Lake
Rowe, Howard H.	Rochester	Fulton
Royster, George M. (S)	Evansville	Vanderburgh
Royster, Robert A.	Evansville	Vanderburgh
Rubens, Eli	South Bend	St. Joseph
Rubin, Milton M.	Terre Haute	Vigo
Rubin, Simon S.	Gary	Lake
Rubright, Robert L.	Hammond	Lake
Ruby, Fred McK. (S)	Wauwatosa, Wis.	Randolph
Rucker, Warren R.	Madison	Jefferson-Switzerland
Ruddell, Karl R. (S)	Indianapolis	Marion
Ruddell, Keith R.	Indianapolis	Marion
Rudesill, Cecil L. (S)	Indianapolis	Marion
Rudesill, Robert L.	Indianapolis	Marion
Rudicel, Max	Kokomo	Howard
Rudolph, Carl J.	South Bend	St. Joseph
Rudolph, Franklin G.	Munster	Lake
Rudolph, Kenneth J.	Evansville	Vanderburgh
Rudolph, Stephen J., Jr.	Cannon A.F.B., New Mexico	Marion
Rudser, Donald H.	Whiting	Lake
Rudy, Donald B.	Salisbury, S. Rhodesia	Wells
Runge, Paul W.	Richmond	Wayne-Union
Rupe, Lloyd O.	Elkhart	Elkhart
Rupel, Ernest (S)	Indianapolis	Marion
Rupper, Warren R.	Evansville	Vanderburgh
Rusche, Henry J.	Evansville	Vanderburgh
Ruschli, Edward B. (S)	Lafayette	Tippecanoe
Rusk, Hubert M.	Wallace	Fountain-Warren
Rusler, William J.	Rochester	Fulton
Russell, Henry T.	West Lafayette	Tippecanoe
Russell, John R.	Indianapolis	Marion
Russell, Richard H.	Evansville	Vanderburgh
Russo, Andrew E.	Crown Point	Lake
Rust, Byron K.	Indianapolis	Marion
Rust, Roland B.	Indianapolis	Marion
Ruth, Martin L.	Indianapolis	Marion
Rutherford, Charles E.	Indianapolis	Benton
Rutherford, Cyrus W. (S)	Indianapolis	Marion
Ryan, C. David	Indianapolis	Marion
Ryan, Glen V.	Indianapolis	Marion
Ryan, Hubert J.	Gary	Lake
Ryan, William J.	Columbus	Bartholomew-Brown

S

Sabens, James A.	Scottsburg	Scott
Sacks, Leonard Z.	Valparaiso	Porter
Sage, Charles V.	Richmond	Wayne-Union
Sage, Russell A.	Indianapolis	Marion
Sahlmann, Hans	Fort Wayne	Allen
Saint, William K.	New Castle	Henry
Sala, Joseph J.	Gary	Lake
Sala, Walter R.	Gary	Lake
Salb, John P.	Jasper	Dubois
Salb, Leo A. (S)	Jasper	Dubois
Salb, Max C.	Indianapolis	Marion
Salon, Harry W.	Fort Wayne	Allen
Salon, Joel W.	Fort Wayne	Allen
Salon, Nathan L.	Fort Wayne	Allen
Salzburg, Herbert E.	Westville	La Porte
Sanders, Bertram W.	Connersville	Fayette-Franklin
Sanders, Harry M.	Indianapolis	Marion
Sanders, Jesse A. (S)	Auburn	De Kalb
Sanders, Marilyn M.	Indianapolis	Marion
Sanderson, Robert B.	South Bend	St. Joseph
Sandock, Louis F.	South Bend	St. Joseph
Sandoz, Harry H.	South Bend	St. Joseph
Saperstein, Morris	Indianapolis	Marion
Santare, Vincent J.	Munster	Lake
Sargent, Wallace B.	Hammond	Lake
Sarver, Francis E.	Fort Wayne	Allen
Saul, F. William	Vincennes	Knox
Savage, Arthur R.	Fort Wayne	Allen
Sayers, Frank E. (S)	Terre Haute	Vigo

Name	City	County
Scales, Alfred B.	Huntingburg	Dubois
Scales, Allen D.	Huntingburg	Dubois
Scamahorn, Malcolm O.	Pittsboro	Hendricks
Scamahorn, Oscar T. (S)	Pittsboro	Hendricks
Scea, Wallace A.	Elwood	Madison
Schaaf, Alvin D.	Jamestown	Boone
Schafer, William C.	Washington	Daviess-Martin
Schaffer, Edward V.	Indianapolis	Marion
Schantz, Richard	Remington	Jasper-Newton
Schaphorst, Richard A.	South Bend	St. Joseph
Scharbrough, Wm. D.	Ewing	Jackson-Jennings
Schauwecker, Cleon M.	Greencastle	Putnam
Schechter, John S.	Indianapolis	Marion
Scheeringa, Ronald H.	Baltimore, Md.	Marion
Scheetz, Marion R.	Lewisville	Henry
Scheier, Emil W.	Indianapolis	Marion
Scheimann, Lois	Valparaiso	Porter
Schell, Harry D.	Bloomington	Owen-Monroe
Schellhouse, Earl M.	St. Louis, Mo.	Allen
Schenck, Foss (S)	Logansport	Cass
Schenck, Ralph E.	Portland	Jay
Scherb, Burton E.	Terre Haute	Vigo
Schermer, Kenneth L.	Indianapolis	Marion
Scherschel, John P.	Bedford	Lawrence
Scheurich, Virgil	Oxford	Benton
Schiller, Herbert A.	South Bend	St. Joseph
Schimmelpfennig, Robert W.	Evansville	Vanderburgh
Schirmer, Robert H.	Evansville	Vanderburgh
Schlademan, Karl R.	Fort Wayne	Allen
Schlaegel, Theo. F., Jr.	Indianapolis	Marion
Schlegel, Donald M.	Indianapolis	Marion
Schlemmer, George H.	Warsaw	Kosciusko
Schlesinger, Daniel J.	Hammond	Lake
Schloss, Robert P.	Fort Wayne	Allen
Schlossberg, Victor E.	Michigan City	La Porte
Schlosser, Herbert C.	Elkhart	Elkhart
Schmalhausen, Ansel W.	Indianapolis	Marion
Schmidt, Eugene E.	Fort Wayne	Allen
Schmidt, Loren F.	Indianapolis	Marion
Schmidt, Richard H.	Valparaiso	Porter
Schmiedicke, Paul H.	Lafayette	Tippecanoe
Schmitt, Richard K.	Columbus	Bartholomew-Brown
Schmitt, Robert J.	Munster	Lake
Schmitt, Robert W.	Richmond	Wayne-Union
Schmoll, Robert J.	Fort Wayne	Allen
Schmoyer, Maurice R.	Indianapolis	Marion
Schneider, Carl J.	Indianapolis	Marion
Schneider, Charles P.	Evansville	Vanderburgh
Schneider, Kenneth D.	Nashville	Bartholomew-Brown
Schneider, Louis A.	Fort Wayne	Allen
Schneider, Paul A.	Indianapolis	Marion
Schnute, Richard B.	Indianapolis	Marion
Schoen, Frederic L.	Fort Wayne	Allen
Schoenhals, Charles E.	Muncie	Delaware-Blackford
Schoolfield, William E.	Orleans	Orange
Schoonveld, Arthur	Brook	Jasper-Newton
Schott, Edward J. (S)	Terre Haute	Vigo
Schreiner, John E.	Bremen	Marshall
Schrepferman, Wayne	Hamilton	Steuben
Schriefer, Victor V.	Evansville	Vanderburgh
Shrock, Ethan E.	Amboy	Miami
Schroeder, Henry R.	Washington	Daviess-Martin
Schroeder, Robert W.	Marion	Grant
Schubert, Jerome C.	Fort Wayne	Allen
Schuchman, Abe	Indianapolis	Marion
Schuchman, Gabriel	Indianapolis	Marion
Schulhof, Maurice G.	Muncie	Delaware-Blackford
Schulz, Kurt J.	Gary	Lake
Schulze, William	Vincennes	Knox
Schumacher, Richard R.	Indianapolis	Marion
Schumaker, Robert A.	Terre Haute	Vigo
Schuman, Edith B.	Bloomington	Owen-Monroe
Schuster, Dwight W.	Indianapolis	Marion
Schwartz, Frederick C.	Kokomo	Howard
Schwartz, Jack	Munster	Lake
Schwartz, Mary M.	Hammond	Lake
Schwarz, Anton	Indianapolis	Marion
Schwarz, Mandel	Gary	Lake
Sciarrone, Francesco	Michigan City	La Porte
Scofield, John B.	Indianapolis	Marion
Scoins, William H.	Fort Wayne	Allen
Scott, Frank M.	South Bend	St. Joseph
Scott, George E.	Indianapolis	Marion
Scott, H. Vaughn	Fort Wayne	Allen
Scott, Irvin H.	Sullivan	Sullivan
Scott, I. Winfield	Indianapolis	Marion
Scott, John S.	La Porte	La Porte
Scott, John R.	Indianapolis	Marion
Scott, Robert O.	Charlottesville	Hancock
Scott, Robert P.	Indianapolis	Marion
Scott, Samuel L.	Indianapolis	Marion
Scott, V. Brown	Shelbyville	Shelby
Scudder, Arthur N.	Brownsburg	Hendricks
Scully, John T.	Gary	Lake
Scully, William E.	Terre Haute	Vigo
Seagle, William	Bloomington	Owen-Monroe
Seal, Perry F.	Brookville	Fayette-Franklin
Seaman, Charles F.	Indianapolis	Marion
Sears, Don	Odon	Daviess-Martin
Sears, M. Maywood (S)	Elkhart	Elkhart
Seat, Marshall H.	Washington	Daviess-Martin
Sedam, Herbert L.	Indianapolis	Marion
Seese, Robert M.	Delphi	Carroll
Segar, Louis H. (S)	Indianapolis	Marion
Segar, William E.	Indianapolis	Marion
Seibel, Robert M.	Nashville	Bartholomew-Brown
Seipel, Stanley	Lanesville	Harrison-Crawford
Selby, Keith E.	South Bend	St. Joseph
Sellers, Francis M.	South Bend	St. Joseph
Sellmer, George W.	Indianapolis	Marion
Senese, Thomas J.	Gary	Lake
Sennett, Cecil M. (S)	Westville	La Porte
Sennett, William K.	Macy	Miami
Senseny, Eugene F.	Fort Wayne	Allen
Serna, Carlos A.	East Chicago	Lake
Serna, Jesus A.	East Chicago	Lake
Seward, George W.	North Manchester	Wabash
Sexson, Hiram T.	Indianapolis	Marion
Seybert, Thomas C.	Indianapolis	Marion
Seyler, Anna G.	La Verne, Calif.	Lake
Shafer, Marion R.	Indianapolis	Marion
Shafer, Richard H.	Alexandria	Madison
Shaffer, Kenneth L.	Vincennes	Knox
Shaffer, William R.	Greensburg	Decatur
Shallenberger, Henry R.	Modoc	Randolph
Shanafelt, Donald K.	Indianapolis	Marion
Shanklin, Jack L.	Bicknell	Knox
Shanklin, Vernon A. (S)	Terre Haute	Vigo
Shanks, Ray W.	Noblesville	Hamilton
Shannon, Wesley E.	Crawfordsville	Montgomery
Shapiro, Burton J.	Indianapolis	Marion
Shapiro, Joseph	East Chicago	Lake
Shapiro, Seymour W.	Whiting	Lake
Sharp, Merle C.	South Bend	St. Joseph

Name	City	County
Sharp, William L.	Anderson	Madison
Shattuck, John C.	Brazil	Clay
Shaw, Houston W.	Jeffersonville	Clark
Shaw, James E.	Fort Wayne	Allen
Sheehan, E. Gregg	Evansville	Vanderburgh
Sheehan, Francis G.	Indianapolis	Marion
Sheek, Kenneth I.	Greenwood	Johnson
Sheets, Charles E.	Manilla	Rush
Sheldon, Suel A.	Anderson	Madison
Shelley, Edward S.	South Bend	St. Joseph
Shelley, Richard J.	Indianapolis	Marion
Shellhouse, Michael	Gary	Lake
Shelton, Clyde F.	New Albany	Floyd
Shenk, Earl M. (S)	Kokomo	Howard
Shepard, Fred F.	College Corner, Ohio	Wayne-Union
Sherer, Kenneth E.	Richmond	Wayne-Union
Sherster, Harry	Indianapolis	Marion
Sherwood, Clarence E.	Madison, So. Dakota	Allen
Shevick, Alexander	Gary	Lake
Shields, Jack E.	Brownstown	Jackson-Jennings
Shields, Tom S.	Richmond	Wayne-Union
Shina, Heskel S.	Charlestown	Clark
Shinabery, Lawerence	Fort Wayne	Allen
Shipley, Edward	Indianapolis	Marion
Shively, John L.	Lafayette	Tippecanoe
Shively, Wyant J.	Evansville	Vanderburgh
Shoemaker, Richard L.	Gas City	Grant
Sholty, William M.	Lafayette	Tippecanoe
Short, John T. (S)	Fort Wayne	Allen
Shoup, Homer B. (S)	Greentown	Howard
Showalter, John P.	Waterloo	De Kalb
Showalter, John R.	Terre Haute	Vigo
Shrader, Carl E.	Warsaw	Kosciusko
Shriner, Richard L.	South Bend	St. Joseph
Shroyer, Herbert	Dunkirk	Jay
Shuck, William A.	Madison	Jefferson-Switzerland
Shugart, Robert R.	Fort Wayne	Allen
Shullenberger, Wendell A.	Indianapolis	Marion
Shulruff, Harry I.	East Chicago	Lake
Shultz, Clifford	Butler	DeKalb
Shumacker, Harris B., Jr.	Indianapolis	Marion
Sibbitt, Joseph W.	Bloomington	Owen-Monroe
Sicks, Okla W.	Indianapolis	Marion
Sidebottom, Earl W.	Indianapolis	Marion
Sidell, James P.	New Haven	Allen
Siderys, Harry	Indianapolis	Marion
Siebe, Jack C.	Indianapolis	Marion
Siebenmorgen, Louis (S)	Terre Haute	Vigo
Siebenmorgen, Paul	Terre Haute	Vigo
Siekierski, Joseph M.	Griffith	Lake
Siersdorfer, Theodore N. (S)	Indianapolis	Marion
Sigmond, Harvey W.	Indianapolis	Marion
Sigmund, William B.	Columbus	Bartholomew-Brown
Silbert, David B.	Shelbyville	Shelby
Silver, Richard A.	Indianapolis	Marion
Silverman, Norman M.	Terre Haute	Vigo
Silvian, Harry A.	Whiting	Lake
Simmons, Frederick H.	Marion	Grant
Simmons, James E.	Indianapolis	Marion
Simms, J. Leon	Indianapolis	Marion
Simpson, Robert L.	Bluffton	Wells
Simpson, William D.	Indianapolis	Marion
Sims, J. Lawrence	Indianapolis	Marion
Singco, Bienvenido	Indianapolis	Marion
Singer, Elmer C. (S)	Fort Wayne	Allen
Sinn, Charles M.	Evansville	Vanderburgh
Siruge, Aldo C.	La Porte	La Porte
Sirlin, Edward M.	Mishawaka	St. Joseph
Sisk, Phillip B.	Indianapolis	Marion
Sisson, Norvel D.	South Bend	St. Joseph
Sixbey, Maurice D.	Muncie	Delaware-Blackford
Skeen, Earl D. (S)	South Bend	Lake
Skillern, Penn G. (S)	South Bend	St. Joseph
Skillern, Scott D.	South Bend	St. Joseph
Skomp, Claud E.	Marion	Grant
Slama, George F.	Gary	Lake
Slama, John T.	Gary	Lake
Slaughter, Howard C.	Evansville	Vanderburgh
Slaughter, John C., Jr.	Evansville	Vanderburgh
Slaughter, Owen L.	Evansville	Vanderburgh
Slichenmyer, Jack E.	Indianapolis	Marion
Slick, Crystal R.	Winchester	Randolph
Sloan, Herbert P.	New Albany	Floyd
Sloan, W. Keith	Madison	Jefferson-Switzerland
Slominski, Harry H. (S)	South Bend	St. Joseph
Slough, O. Thomas	Kendallville	Noble
Sluss, David H.	Indianapolis	Marion
Smith, A. Wilson	Greencastle	Putnam
Smith, Barton T.	Marion	Grant
Smith, Byron J.	Kingman	Fountain-Warren
Smith, Charles F.	Kokomo	Howard
Smith, David L.	Indianapolis	Marion
Smith, E. Rogers (S)	Indianapolis	Marion
Smith, Francis C.	Indianapolis	Marion
Smith, Fred, Jr.	Tell City	Perry
Smith, Frederick R.	Spencer	Owen-Monroe
Smith, Gloster J.	Kokomo	Howard
Smith, Gordon L.	Evansville	Vanderburgh
Smith, Herbert N.	Brookville	Fayette-Franklin
Smith, Herschel S.	Bloomington	Owen-Monroe
Smith, James S.	Muncie	Delaware-Blackford
Smith, Jerald E.	Hammond	Lake
Smith, John H.	Greenfield	Hancock
Smith, Lee Jr.	Lakeville	St. Joseph
Smith, Lloyd H.	North Manchester	Wabash
Smith, Lowell C.	Lafayette	Tippecanoe
Smith, Mark E.	New Castle	Henry
Smith, Philip L.	Fort Wayne	Allen
Smith, Ralph O.	Vincennes	Knox
Smith, Richard B.	Fort Wayne	Allen
Smith, Robert D.	Lowell	Lake
Smith, Rodney D. (S)	Bloomington	Owen-Monroe
Smith, R. Lee	Osgood	Ripley
Smith, Roger C.	Fort Wayne	Allen
Smith, Roy Lee	Indianapolis	Marion
Smith, Roy M.	Evansville	Vanderburgh
Smith, S. Joseph	Vincennes	Knox
Smith, Stephen D.	Knightstown	Rush
Smith, Stephen M.	Indianapolis	Marion
Smith, Theodore J.	Whiting	Lake
Smith, William B.	Indianapolis	Marion
Smith, William M.	Westville	La Porte
Smucker, Ernest E.	Goshen	Elkhart
Snapp, Richard A.	Columbus	Bartholomew-Brown
Sneary, Max E.	Avilla	Noble
Snider, Byron	Indianapolis	Marion
Snively, William D., Jr.	Evansville	Vanderburgh
Snodgrass, Robert E.	Greenwood	Johnson
Snowhite, Arthur B.	Marion	Grant
Snyder, Earl R. (S)	Troy	Perry
Snyder, Jerome A.	Munster	Lake
Snyder, Morris C.	Richmond	Wayne-Union
Snyder, Parker W.	Peru	Miami
Snyderman, Sanford C.	Fort Wayne	Allen
Sokol, Allen B.	Whiting	Lake
Solis, Roger V.	Hammond	Lake
Solomon, Reuben A.	Indianapolis	Marion

Name	City	County
Somers, Gerald H.	Fort Wayne	Allen
Somerville, J. W.	Clinton	Parke-Vermillion
Sonne, Irvin H., Jr.	New Albany	Floyd
Soper, Hunter A.	Indianapolis	Marion
Sorenson, Raymond	Kokomo	Howard
Sorg, David A.	Bluffton	Wells
Souder, Bonnell M. (S)	Auburn	De Kalb
Souter, Martha C.	Indianapolis	Marion
Southard, Carl B.	Noblesville	Hamilton
Sovine, Joe W.	Indianapolis	Marion
Spahr, Donald E.	Portland	Jay
Spahr, John F., Jr.	Indianapolis	Marion
Spalding, Joseph J.	Indianapolis	Marion
Spalding, Wendell L.	Mishawaka	St. Joseph
Spangler, Jesse S.	Kokomo	Howard
Spangler, John S.	Indianapolis	Marion
Sparks, Alan L.	Indianapolis	Marion
Sparks, Paul W.	Winchester	Randolph
Spears, John K.	Paoli	Orange
Spears, John M.	Indianapolis	Marion
Speas, Robert C.	Terre Haute	Vigo
Speck, Carlson R.	Muncie	Delaware-Blackford
Speckman, Glenn H.	Indianapolis	Marion
Spellman, Frank W.	Gary	Lake
Spencer, Beaufort A.	Bloomington	Owen-Monroe
Spencer, Frederic	Vincennes	Knox
Spencer, C. Herbert	Fort Wayne	Allen
Spenner, Raymond W.	South Bend	St. Joseph
Spindler, Robert D.	Shelbyville	Shelby
Spivack, Mary	Gary	Lake
Spolyar, Louis W.	Indianapolis	Marion
Sponder, Joseph (S)	Gary	Lake
Spray, Page E.	Elkhart	Elkhart
Sprecher, Herman C.	Evansville	Vanderburgh
Springstun, George H.	Oaktown	Knox
Springstun, Walter R.	Evansville	Vanderburgh
Spurlock, Fae H.	West Lafayette	Tippecanoe
Sputh, Carl B., Jr.	Indianapolis	Marion
Sroka, Alexander G.	Hammond	Lake
Sroka, Stanley J.	Highland	Lake
Stadler, Harold E.	Indianapolis	Marion
Staff, Robert A.	Terre Haute	Parke-Vermillion
Stafford, William C.	Plainfield	Hendricks
Stahl, Edward T.	Lafayette	Tippecanoe
Stallings, Hugh A.	Evansville	Vanderburgh
Stallman, Carl F.	Kendallville	Noble
Stalter, Gaylord W.	North Webster	Whitley
Stamper, Joseph H.	Anderson	Madison
Stamper, Lucian A.	Richmond	Wayne-Union
Stamper, Robert J.	Anderson	Madison
Stander, Richard W.	Indianapolis	Marion
Stangle, William J.	Bloomington	Owen-Monroe
Stanley, John S.	Indianapolis	Marion
Stanley, Robert G.	Fort Wayne	Allen
Stansbury, William E.	Indianapolis	Marion
Starks, William O.	Anderson	Madison
Stasick, Murray	Hammond	Lake
Staten, Jesse C.	Indianapolis	Marion
Stauffer, George E.	Mooreland	Henry
Stauffer, Richard C.	Fort Wayne	Allen
Stauffer, Walter A. (S)	Elkhart	Elkhart
Staunton, Henry A.	South Bend	St. Joseph
Stayton, Chester A., Jr.	Indianapolis	Marion
Steckler, Robert J.	Thousand Oaks, Calif.	Vanderburgh
Stecy, Peter	Whiting	Lake
Steele, Dick J.	Greencastle	Putnam
Steele, Everett B.	Crown Point	Lake
Steele, Frank M.	Muncie	Delaware-Blackford
Steele, Hugh H.	Lafayette	Tippecanoe
Steele, Paul W.	Evansville	Vanderburgh
Steen, Lowell H.	Whiting	Lake
Steffen, Julian T.	Wabash	Wabash
Steffy, Ralph M.	Portland	Jay
Steigmeyer, David J.	Fort Wayne	Allen
Stein, Richard H.	Vincennes	Knox
Steinem, Joseph L.	Connersville	Fayette-Franklin
Steinmetz, Edward F.	Indianapolis	Marion
Stephens, Donald E.	Indianapolis	Marion
Stephens, Kuhrman H.	Indianapolis	Marion
Stephens, Lowell R.	Covington	Fountain-Warren
Stepleton, John D.	Richmond	Wayne-Union
Stern, Mona K.	East Gary	Lake
Stern, Samuel L.	Hammond	Lake
Sterne, John H.	Evansville	Vanderburgh
Steury, Ernest M.	Berne	Marion
Steussy, Calvin N.	New Castle	Henry
Stevens, Adam C.	Bluffton	Wells
Stevens, Edwin W.	Munster	Lake
Stevens, Sydney L.	Indianapolis	Marion
Stewart, J. Frank W.	Vincennes	Knox
Stewart, L. Ray	Evansville	Vanderburgh
Stewart, Walter E. (S)	Terre Haute	Vigo
Stibbins, Warren E.	Muncie	Delaware-Blackford
Stier, Paul L.	Fort Wayne	Allen
Stilwell, William R.	Richmond	Wayne-Union
Stimson, Harry R.	Gary	Lake
Stine, Marshall E.	Bremen	Marshall
Stinson, Dean K.	Rochester	Fulton
Stinson, William M.	Anderson	Madison
Stiver, Daniel D.	South Bend	St. Joseph
Stoelting, J. Lewis	Terre Haute	Vigo
Stoelting, Vergil K.	Indianapolis	Marion
Stogdill, William J.	South Bend	St. Joseph
Stogsdill, Willis W.	Franklin	Johnson
Stoltz, Robert M.	Valparaiso	Porter
Stone, Alvin T.	Indianapolis	Marion
Stone, Robert C.	Ligonier	Noble
Stookey, Richard D.	Gary	Lake
Stoops, Jean T.	Wabash	Wabash
Storey, D. Edmund	Indianapolis	Marion
Storey, Joseph L.	Indianapolis	Marion
Stork, Harvey K.	Huntingburg	Dubois
Stork, Urban F. D.	Evansville	Vanderburgh
Storms, Roy B. (S)	Indianapolis	Marion
Stouder, Albert E.	Kempton	Tipton
Stouder, Charles E.	Ellettsville	Owen-Monroe
Stout, Francis E.	Muncie	Delaware-Blackford
Stout, Harry T.	Frankfort	Clinton
Stover, Wendell C.	Boonville	Warrick
Stoycoff, Christ M. (S)	Gary	Lake
Strang, William C.	Indianapolis	Marion
Stratigos, Joseph S.	South Bend	St. Joseph
Strayer, Joseph W.	Lafayette	Tippecanoe
Streck, Francis A.	Lawrenceburg	Dearborn-Ohio
Strecker, William L.	Terre Haute	Vigo
Streepey, Jefferson I.	New Albany	Floyd
Streeter, Ralph T.	Indianapolis	Marion
Stricker, Paul J.	New Castle	Henry
Strehler, Don A.	Bluffton	Wells
Strickland, Karl S. (S)	Princeton	Gibson
Strickland, Neil R.	Indianapolis	Marion
Stringer, Drennon D.	Mishawaka	St. Joseph
Strong, Daniel S. (S)	Terre Haute	Vigo
Stroup, Tyler J.	Indianapolis	Marion
Strueh, Paul E.	Evansville	Vanderburgh
Stubbins, William M.	Elkhart	Elkhart
Stucky, Elsworth K.	Indianapolis	Marion
Stucky, Jerry L.	Fort Wayne	Allen
Studebaker, Lloyd R.	LaGrange	LaGrange
Stultz, Quentin F.	Ligonier	Noble
Stump, Loyd K.	Indianapolis	Marion

Name	City	County
Stump, Richard L.	Muncie	Delaware-Blackford
Stump, Thomas A.	Indianapolis	Marion
Stumpf, Edwin E.	New Haven	Allen
Stuntz, Edgar C.	Lafayette	Tippecanoe
Sturgis, Donald G.	Sellersburg	Clark
Suelzer, John G.	Indianapolis	Marion
Suess, Robert E.	Indianapolis	Marion
Sugarman, Benjamin E.	French Lick Springs	Orange
Sullivan, James J.	Indianapolis	Marion
Sullivan, John M.	Terre Haute	Vigo
Sullivan, Robert E.	Fort Wayne	Allen
Summerlin, Jack D.	Indianapolis	Marion
Surratt, Mary Norris	Indianapolis	Marion
Sutton, William E.	Indianapolis	Marion
Suzuki, Tsutomu T.	Covington	Fountain-Warren
Swan, John R.	Indianapolis	Marion
Swank, Lucretia R.	Elkhart	Elkhart
Sweany, Stanford K.	Munster	Lake
Sweet, Howard E.	Richmond	Wayne-Union
Swihart, Danny D.	Elkhart	Elkhart
Swihart, Homer R.	Elkhart	Elkhart
Syler, Robert W.	Bloomington	Owen-Monroe
Symmes, Alfred T.	Indianapolis	Marion
Symon, William E.	Bluffton	Wells
Szynal, John S.	Indianapolis	Marion

T

Tabaka, Francis B.	La Porte	La Porte
Tager, Stephen N.	Evansville	Vanderburgh
Takahashi, Masato	Indianapolis	Marion
Talarico, Leonard H.	Rochester, N. Y.	Marion
Talbert, Pierre C.	Bluffton	Wells
Talbott, Dan E.	Indianapolis	Marion
Tanner, Henry S.	Indianapolis	Marion
Taraba, Ralph W.	Bloomington	Owen-Monroe
Tate, Elizabeth	Dunkirk	Jay
Taub, Robert G.	Michigan City	La Porte
Taube, Jack I.	Indianapolis	Marion
Taylor, Clifford C.	Indianapolis	Marion
Taylor, Cyril	Indianapolis	Marion
Taylor, Donald R.	Muncie	Delaware-Blackford
Taylor, Everett C.	Upland	Grant
Taylor, Frederic W.	Indianapolis	Marion
Taylor, George N.	Lafayette	Tippecanoe
Taylor, James A.	Anderson	Madison
Taylor, John R.	Palestine, Ill.	Sullivan
Taylor, M. Reed, Jr.	Howe	LaGrange
Taylor, Robert G.	Fort Wayne	Allen
Taylor, Wade H. (S)	Ambia	Benton
Taylor, William R. (S)	Richmond	Wayne-Union
Teague, Frank W.	Indianapolis	Marion
Teal, Dorothy D.	Columbus	Bartholomew-Brown
Teegarden, Joseph A. (S)	East Chicago	Lake
Teegarden, Joseph A., Jr.	East Chicago	Lake
Teixler, Victor A.	Indianapolis	Marion
Templeton, Ames R.	Mishawaka	St. Joseph
Templeton, Ian S.	Seymour	Jackson-Jennings
Templin, David B.	Lowell	Lake
Tennant, David L.	Fort Wayne	Allen
Tennis, George T.	Greencastle	Putnam
Tepfer, Milton	Indianapolis	Marion
Teplinsky, Louis L.	East Chicago	Lake
TerBush, Edward L.	Logansport	Cass
Terrill, Richard W.	Fort Wayne	Allen
Terry, Lloyd	Danville	Hendricks
Terry, Robert H.	Boonville	Warrick
Terveer, John B.	Pomona, Calif.	Adams
Test, Charles E.	Indianapolis	Marion
Teter, George V.	Indianapolis	Marion
Teters, Melvin S. (S)	Middlebury	Elkhart
Tether, Joseph E.	Indianapolis	Marion
Tetrick, Lain	Portage	Porter
Tharp, Donald W.	Muncie	Delaware-Blackford
Tharpe, Ray G.	Indianapolis	Marion
Thatcher, Hugh K., Jr.	Indianapolis	Marion
Thayer, Benet W.	North Vernon	Jackson-Jennings
Theobald, Sterling	Dyer	Lake
Thimlar, James W. (S)	Fort Wayne	Allen
Thom, Julia S.	Terre Haute	Vigo
Thoman, Rex L.	Indianapolis	Marion
Thomas, Andrew C.	Hobart	Lake
Thomas, Charles R.	Indianapolis	Marion
Thomas, Daniel D.	Gary	Lake
Thomas, Edward P.	Indianapolis	Marion
Thomas, Everett W.	Warsaw	Kosciusko
Thomas, Fred A.	Indianapolis	Marion
Thomas, Gerald J.	Gary	Lake
Thomas, Lowell I.	Indianapolis	Marion
Thomas, Morris E.	Indianapolis	Marion
Thomas, W. Clayton	Carmel	Hamilton
Thompson, Alfred A. (S)	Tyner	Marshall
Thompson, B. Jay	Marion	Grant
Thompson, Claude N.	Waynetown	Montgomery
Thompson, Frank M.	Columbia City	Whitley
Thompson, John M.	South Bend	St. Joseph
Thompson, John V.	Indianapolis	Marion
Thompson, Joseph F.	Indianapolis	Marion
Thompson, Naiad Mason	Evansville	Vanderburgh
Thompson, Paul D.	Indianapolis	Marion
Thompson, Robert A.	South Bend	St. Joseph
Thompson, Wayne H.	Indianapolis	Marion
Thompson, Wm. R.	Winamac	Pulaski
Thorne, Charles E.	New Castle	Henry
Thornton, Harold C.	Indianapolis	Marion
Thornton. Maurice J.	South Bend	St. Joseph
Throop, Frank B.	Indianapolis	Marion
Thurston, Harrison S. (S)	Dayton, Ohio	Marion
Tilden, Margaret H.	Evansville	Vanderburgh
Tiley, George A.	Greenwood	Johnson
Tilka, Edward C.	Hammond	Lake
Timmons, Gerald D.	Indianapolis	Marion
Tindall, George T.	Indianapolis	Marion
Tindall, Paul R. (S)	Shelbyville	Shelby
Tindall, William R.	Shelbyville	Shelby
Tinsley, Frank W.	Indianapolis	Marion
Tinsley, Walter B. (S)	Indianapolis	Marion
Tinsley, Walter B., Jr.	Indianapolis	Marion
Tipton, William R.	Greencastle	Putnam
Tirman, Wallace S.	South Bend	St. Joseph
Tischer, E. Paul	Indianapolis	Marion
Tisserand, John B. Jr.	Evansville	Vanderburgh
Todd, David D. (S)	LaJolla, Calif.	Elkhart
Tofaute, John L.	Indianapolis	Marion
Tolbert, Robert D.	Vincennes	Knox
Tomak, Milton E.	Linton	Greene
Tomlin, Hugh M.	Muncie	Delaware-Blackford
Tomusk, August N.	Fort Wayne	Allen
Tondra, John M.	Indianapolis	Marion
Topolgus, James N.	Bloomington	Owen-Monroe
Topping, Malachi C.	Terre Haute	Vigo
Torella, Jose A.	Indianapolis	Marion
Tosick, William A.	Indianapolis	Marion
Toumey, Fred L.	Indianapolis	Marion
Tower, James H., Jr.	Shelbyville	Shelby
Tower, Thomas K.	Campbellsburg	Washington
Trachtenberg, Lee	Hammond	Lake
Tranter, William F.	Sharpsville	Tipton
Traver, Perry C. (S)	South Bend	St. Joseph
Tremain, Milton A. (S)	Adams	Decatur
Treon, James F. (S)	Aurora	Dearborn-Ohio

Name	City	County
Trepagnier, Francis B.	E. Chicago	Lake
Trier, Herbert P.	Fort Wayne	Allen
Trimble, John G.	Kokomo	Howard
Trout, Carl J.	Lafayette	Tippecanoe
Troutwine, William R.	Crown Point	Lake
Troy, Jack M.	Whiting	Lake
Troyer, Dana	Goshen	Elkhart
Troyer, George W.	Elkhart	Elkhart
Trudgen, Spencer F.	Indianapolis	Marion
Trusler, H. Marshall	Indianapolis	Marion
Trusler, Harold M.	Indianapolis	Marion
Tsatsos, George C.	Hartford, Conn.	Lake
Tubbs, George R. (S)	Lafayette	Tippecanoe
Tuchman, Joseph H.	Indianapolis	Marion
Tucker, Oral A.	Daleville	Delaware-Blackford
Tucker, Warren S.	Indianapolis	Marion
Tuholski, James M.	Evansville	Vanderburgh
Tully, John A. (S)	New Castle	Henry
Tunnell, Harry D.	Michigan City	La Porte
Turgi, Robert W.	Gary	Lake
Turley, Verne L.	Fowler	Benton
Turner, Anna Goss	Madison	Jefferson-Switzerland
Turner, David D.	Lawrenceburg	Dearborn-Ohio
Turner, Harold B. (S)	Bloomfield	Greene
Turner, Isabel B.	Evansville	Vanderburgh
Turner, Jack J.	Bloomfield	Greene
Turner, John P.	Goshen	Elkhart
Turner, Oscar A. (S)	Madison	Jefferson-Switzerland
Tweedall, Daniel C.	Evansville	Vanderburgh
Tyler, Edward A.	Indianapolis	Marion
Tyler, Frank T. (S)	New Albany	Floyd
Tyler, Stanley H.	Bloomington	Owen-Monroe
Tyner, Harlan H.	Indianapolis	Marion
Tyrrell, Joseph J.	Calumet City, Ill.	Lake
Tyrrell, Thomas C.	Calumet City, Ill.	Lake

U

Ullom, Ralph B.	Indianapolis	Marion
Ulrey, Robert P.	Elwood	Madison
Underwood, George M.	Lafayette	Tippecanoe
Ungemach, Willo F.	Fort Wayne	Allen
Urruti, Arnoldo H.	South Bend	St. Joseph
Urschel, Dan L.	Mentone	Kosciusko

V

Vagner, S. Bernard	South Bend	St. Joseph
Valencia, M. Monico	Gary	Lake
Van Bokkelen, Robert W.	Mooresville	Morgan
Van Buskirk, Edmund L.	Lafayette	Tippecanoe
Van Campen, Warren M.	Huntington	Huntington
Vance, William C.	Richmond	Wayne-Union
Van Denbark, Howard M.	Indianapolis	Marion
Van Den Bosch, Wallace R.	Lafayette	Tippecanoe
Vandivier, Robert M.	Indianapolis	Marion
Van Dorn, Myron J.	Indianapolis	Marion
Van Fleet, Josephine	Indianapolis	Marion
Van Fleit, William E.	South Bend	St. Joseph
Van Kirk, John R.	West Lafayette	Tippecanoe
Van Kirk, Paul P.	Frankfort	Clinton
Van Meter, C. Powell	Indianapolis	Marion
Van Ness, William C.	Summitville	Madison
Van Nuys, John D.	Indianapolis	Marion
Van Rie, Leo P. (S)	Mishawaka	St. Joseph
Van Sandt, Frank A. (S)	Bloomfield	Greene
Van Tassel, Charles J.	Indianapolis	Marion
Van Vactor, Helen D.	Indianapolis	Marion
Van Wienen, John	Martinsville	Morgan
Vaughn, Walter R.	Vincennes	Knox
Veach, Lester W.	Bainbridge	Putnam
Veach, Richard L.	Bainbridge	Putnam
Veach, William L.	Terre Haute	Vigo
Vellios, Frank	Indianapolis	Marion
Venable, George L. (S)	North Manchester	Wabash
Venis, Kemper N.	Muncie	Delaware-Blackford
Vermilya, Robert W.	Lafayette	Tippecanoe
Verplank, Grover L. (S)	Gary	Lake
Viehe, Robert W. (S)	Evansville	Vanderburgh
Vietzke, Paul C. F.	Valparaiso	Porter
Vingis, Bronie A.	Greenfield	Hancock
Viney, Charles L.	Logansport	Cass
Viray, Victoriano G.	Crawfordsville	Montgomery
Visher, John W. (S)	Evansville	Vanderburgh
Vivian, Donald E.	New Castle	Henry
Vogel, John L.	Columbia City	Whitley
Vogel, Lloyd A., Jr.	Indianapolis	Allen
Vogel, L. John	Mount Vernon	Posey
Voges, Edward C.	Terre Haute	Vigo
Vollrath, Victor J.	Indianapolis	Marion
VonAsch, George	La Porte	La Porte
von der Lieth, Wm. C.	Vincennes	Knox
Von Der Haar, Gerard	Indianapolis	Marion
vonder Haar, Thomas E.	Evansville	Vanderburgh
Voorhees, Robert J.	Clayton, Mo.	Allen
Voorhies, McKinley	Gary	Lake
Vore, Hugh A.	Highland	Lake
Vore, Louring W.	Plymouth	Marshall
Vore, Robert E.	Indianapolis	Marion
Vormohr, Joseph F.	Portland	Jay
Voss, Gert	Muncie	Delaware-Blackford
Voyles, Harry E.	New Albany	Floyd
Vurpillat, Francis J.	South Bend	St. Joseph

W

Wachob, Tom W., Jr.	Kokomo	Howard
Wack, James E.	South Bend	St. Joseph
Wade, Alfred A. (S)	Howe	LaGrange
Wade, Reynolds W.	New Haven	Allen
Wagner, Anabel R.	Lafayette	Marion
Wagner, Arthur L.	Jasper	Dubois
Wagner, David G.	Goshen	Elkhart
Wagner, Lindley H.	Lafayette	Marion
Wagner, Richard	Huntington	Huntington
Wagoner, B. D.	Union City	Randolph
Wagoner, George W.	Delphi	Carroll
Wagoner, John R.	Anderson	Madison
Wainscott, Clinton S.	Indianapolis	Marion
Wait, Jerome H.	Columbia City	Whitley
Waits, Chester L.	Colfax	Clinton
Walden, Heinz J.	Terre Haute	Vigo
Waldo, Guy H.	Bedford	Lawrence
Waldo, J. Thayer	Indianapolis	Marion
Walerko, Frank	Mishawaka	St. Joseph
Walker, Adolph P.	East Chicago	Lake
Walker, Edwin M., Jr.	South Bend	St. Joseph
Walker, Floyd B.	Fort Wayne	Allen
Walker, Jack M.	Muncie	Delaware-Blackford
Walker, James L. (S)	LaFontaine	Wabash
Walker, Louis	Greensburg	Decatur
Walker, Thomas	Brownsburg	Hendricks
Walker, William F.	Evansville	Vanderburgh
Wallace, Collins R.	Fort Wayne	Allen
Wallace, Elmer L.	New Albany	Floyd
Wallace, Hawthorne C.	Crawfordsville	Montgomery
Walter, Paul A. F. III	Evansville	Vanderburgh
Walter, Robert F.	Evansville	Vanderburgh
Walters, Charles E.	Mishawaka	St. Joseph
Walters, Eleanor	Gary	Lake
Walters, Jack L.	Franklin	Johnson
Walters, William H.	Michigan City	La Porte
Walther, Joseph E.	Indianapolis	Marion
Walton, R. Lee	Marion	Grant

Name	City	County
Walton, William M.	Indianapolis	Marion
Wang, Tieh C.	East Chicago	Lake
Wanninger, Horace	Richmond	Wayne-Union
Warbinton, Fred P.	Plainfield	Hendricks
Ward, Gerald F.	Fort Wayne	Allen
Ward, James W.	South Bend	St. Joseph
Ward, Paula B.	Fort Wayne	Allen
Ward, Wesley C.	Indianapolis	Marion
Ware, Herbert E.	Muncie	Delaware-Blackford
Ware, John R.	Russiaville	Howard
Warfield, Chester H.	Fort Wayne	Allen
Warman, Alvah P. (S)	Indianapolis	Marion
Warn, William J.	Milan	Ripley
Warneke, Charles H.	Indianapolis	Marion
Warner, Charles L.	Evansville	Vanderburgh
Warren, Carroll B.	Marion	Grant
Warren, Lewis T.	Michigan City	La Porte
Warrick, Francis B.	Richmond	Wayne-Union
Warrick, Homer L.	Osceola	St. Joseph
Warriner, James B.	Indianapolis	Marion
Warshaw, Seymour	Columbus	Bartholomew-Brown
Warvel, John H., Jr.	Indianapolis	Marion
Warvel, John H.	Indianapolis	Marion
Washington, G. Kenneth	Gary	Lake
Wasserman, Don H.	Indianapolis	Marion
Waters, George E.	Evansville	Vanderburgh
Watterson, Gerald T.	Connersville	Fayette-Franklin
Way, James A.	Bloomington	Owen-Monroe
Waymire, William M.	Franklin	Johnson
Weaver, Timothy M. (S)	Brazil	Clay
Webb, Harry D.	Anderson	Madison
Webb, Lawrence C.	Dana	Parke-Vermillion
Weber, Edgar H.	Evansville	Vanderburgh
Weber, John R.	Fort Wayne	Allen
Weber, Joseph G. S.	Terre Haute	Vigo
Webster, Paul L.	Lafayette	Tippecanoe
Webster, Robert K.	Brazil	Clay
Weddle, Chas. O.	Lebanon	Boone
Weeks, Patrick H. (S)	Michigan City	La Porte
Weems, Mallory P.	Jeffersonville	Clark
Wehrman, Jule O. (S)	Indianapolis	Marion
Weigand, Clayton G.	Indianapolis	Marion
Weinbaum, Jack G.	Terre Haute	Vigo
Weinberg, Benjamin A.	Whiting	Lake
Weinberg, Samuel	Marion	Grant
Weinland, George C.	Columbus	Bartholomew-Brown
Weinstein, Edwin B.	Richmond	Wayne-Union
Weinstock, Adolph	Rolling Prairie	La Porte
Weir, Dale	Louisville, Ky.	LaGrange
Weirich, Charles I.	Butler	De Kalb
Weisenberger, Brockton L.	Lawrenceburg	Dearborn-Ohio
Weiskopf, Henry S.	Gary	Lake
Weiss, Albert E.	Michigan City	LaPorte
Weiss, Eugene	South Bend	St. Joseph
Weiss, Henry G. (S)	Evansville	Vanderburgh
Weiss, Jason	Indianapolis	Marion
Weiss, John T.	Hobart	Lake
Weiss, Louis L.	Anderson	Madison
Weissman, Charles G.	Hammond	Lake
Weitemier, Raymond A.	Richmond	Wayne-Union
Weitzel, Roland E.	Princeton	Gibson
Welborn, Mell B.	Evansville	Vanderburgh
Welch, Norbert M.	Vincennes	Knox
Weldy, Bryce P.	Hartford City	Delaware-Blackford
Weller, Charles A. (S)	Indianapolis	Marion
Weller, Ralph D.	Rossville	Clinton
Weller, Wendell	Lafayette	Tippecanoe
Wells, William R.	Princeton	Gibson
Wenger, James E.	Nappanee	Elkhart
Wenzler, Paul J.	Bloomington	Owen-Monroe
Werry, Leslie E.	Hartford City	Delaware-Blackford
Wertenberger, Morris D.	Richmond	Wayne-Union
Wesemann, Merrill M.	Franklin	Johnson
West, Joseph L.	Indianapolis	Marion
Westfall, B. Kemper	Indianapolis	Marion
Westfall, George S.	Goshen	Elkhart
Westfall, John B.	Indianapolis	Marion
Westhaysen, Peter V.	Munster	Lake
Wharton, Russell O. (S)	Gary	Lake
Wheeler, Byron C.	Terre Haute	Vigo
Wheeler, David E.	Indianapolis	Marion
Whereatt, Richard	Munster	Lake
Whipps, Charles E. (S)	Carlisle	Sullivan
Whisler, Frederick M. (S)	Wabash	Wabash
Whitaker, Jack	Gary	Lake
Whitcomb, Roger F.	Shelbyville	Shelby
White, Chester S. (S)	Rosedale	Parke-Vermillion
White, Donald G.	South Bend	St. Joseph
White, Donald J.	Indianapolis	Marion
White, Douglas H.	Indianapolis	Marion
White, Gilbert H., Jr.	Hammond	Lake
White, Harvey E.	Farmland	Randolph
White, Isaac D. (S)	Clinton	Parke-Vermillion
White, James V.	Terre Haute	Vigo
White, John B., Jr.	Indianapolis	Marion
White, Philip T.	Indianapolis	Marion
Whitlock, Francis C.	Mishawaka	St. Joseph
Whitlock, Merle E.	Mishawaka	St. Joseph
Wiatt, Leonard H.	Knightstown	Henry
Wible, James H.	Kokomo	Howard
Wick, Alfred A.	Fort Wayne	Allen
Wickstrom, Otto W.	Columbus	Bartholomew-Brown
Widdifield, G. E.	Indianapolis	Marion
Wierzalis, Edward F.	Hartford City	Delaware-Blackford
Wiethoff, Clifford A.	Seymour	Jackson-Jennings
Wiland, Olin K.	Richmond	Wayne-Union
Wilder, Gordon B.	Anderson	Madison
Wilhelm, Agatha M.	South Bend	St. Joseph
Wilhelm, Guido P.	New Castle	Henry
Wilhelmus, C. Kenneth	Evansville	Vanderburgh
Wilhelmus, Charles M. (S)	Newburgh	Warrick
Wilhelmus, Gilbert M.	Evansville	Vanderburgh
Wilkens, Irvin W.	Indianapolis	Marion
Willan, Horace R. (S)	Martinsville	Morgan
Williams, Berniece M.	Fort Wayne	Allen
Williams, Alexander S.	Gary	Lake
Williams, Charles D.	Indianapolis	Marion
Williams, Clifford L.	Indianapolis	Marion
Williams, Earl K.	Frankfort	Clinton
Williams, Edwin D.	Gary	Lake
Williams, Everett W.	Columbus	Bartholomew-Brown
Williams, Francis M.	Anderson	Madison
Williams, Fred R.	Gary	Lake
Williams, Fielding P.	Huntingburg	Dubois
Williams, Harold W.	Indianapolis	Marion
Williams, Howard S.	Indianapolis	Marion
Williams, Hugh L.	Indianapolis	Marion
Williams, John H.	Shipshewana	LaGrange
Williams, Paul A.	Rensselaer	Jasper-Newton
Williams, Paul D.	Indianapolis	Marion
Williams, Robert D.	Markleville	Madison
Williams, Robert H.	Anderson	Madison

Name	City	County
Williams, Russell S.	Lafayette	Tippecanoe
Willis, Charles F.	Evansville	Vanderburgh
Willison, George W.	Evansville	Vanderburgh
Willner, Alan	Clarksville	Clark
Wills, Max	Auburn	De Kalb
Wilmore, Ralph C.	Indianapolis	Marion
Wilms, John H.	W. Lafayette	Tippecanoe
Wilson, David	Indianapolis	Vanderburgh
Wilson, David O.	Ft. McClellan, Ala.	Marion
Wilson, Fred L.	Terre Haute	Vigo
Wilson, Fred M.	Indianapolis	Marion
Wilson, Guy H.	Bicknell	Knox
Wilson, James M.	South Bend	St. Joseph
Wilson, John	Columbia City	Whitley
Wilson, John D.	Evansville	Vanderburgh
Wilson, Leslie	Fort Wayne	Allen
Wilson, Ned A.	Marion	Grant
Wilson, Oliver R.	Indianapolis	Marion
Wilson, Orley E.	Elkhart	Elkhart
Wilson, Paul E. (S)	Boonville	Warrick
Wilson, Paul H.	Logansport	Cass
Wilson, Ralph	Evansville	Vanderburgh
Wilson, Roland B.	Fort Wayne	Allen
Wilson, Talmage L.	Bloomington	Owen-Monroe
Wilson, Wymond B.	Mentone	Kosciusko
Wimmer, Robert N. (S)	Gary	Lake
Winklepleck, A. M.	Connersville	Fayette-Franklin
Winter, Donald K.	Logansport	Cass
Winter, William P.	Martinsville	Morgan
Wirey, Harold R.	Indianapolis	Marion
Wise, Charles L.	Camden	Carroll
Wise, William R.	Indianapolis	Marion
Wiseheart, Oscar H. (S)	North Salem	Hendricks
Wiseheart, Robert H.	Lebanon	Boone
Wiseman, V. Earle	Greencastle	Putnam
Wishard, Wm. N., Jr.	Indianapolis	Marion
Witham, Robert L.	Indianapolis	Marion
Witt, William R.	Jeffersonville	Clark
Wixted, John F.	South Bend	St. Joseph
Wixted, Julia F.	South Bend	St. Joseph
Woerner, Thomas E.	Indianapolis	Marion
Wohlfeld, Gerald	Indianapolis	Floyd
Wohlfeld, Julius B.	Bedford	Lawrence
Wojcik, Ladislas D.	Marion	Grant
Wolfe, Morton F.	New Albany	Floyd
Wolfe, Nelson	New Albany	Floyd
Wolfram, Don J.	Indianapolis	Marion
Wolverton, George M.	Clarksville	Clark
Woner, John W.	Linton	Greene
Wong, Norman F.	Linden	Tippecanoe
Wong, Samuel N.	Hammond	Lake
Wood, Donald E.	Indianapolis	Marion
Wood, Opal L.	Brazil	Clay
Woodard, Abram S., Jr.	Indianapolis	Marion
Woodbury, John W.	Marion	Grant
Wooden, Thomas F.	Munster	Lake
Woods, Arba L. (S)	Evansville	Posey
Woods, James R., Jr.	Greenfield	Hancock
Woods, Wm. P. (S)	Evansville	Vanderburgh
Woodson, Dan E.	Evansville	Vanderburgh
Woodward, Ben E.	Evansville	Vanderburgh
Woolery, Richard H.	Bedford	Lawrence
Woolling, Kenneth R.	Indianapolis	Clinton
Work, Bruce A.	Frankfort	Clinton
Work, James A., Jr. (S)	Elkhart	Elkhart
Worley, Ansel C.	Fort Wayne	Allen
Worley, Henry L.	New Albany	Floyd
Worley, Joseph P.	Indianapolis	Marion
Worley, Richard H.	Indianapolis	Marion
Worth, C. Willard	Milroy	Rush
Wrege, Malcolm L.	Indianapolis	Marion
Wright, Cecil S.	Anderson	Madison
Wright, J. Wm., Jr.	Indianapolis	Marion
Wright, Wm. C.	Fort Wayne	Allen
Wurster, Herbert C.	Mishawaka	St. Joseph
Wyatt, James L., III	Fort Wayne	Allen
Wygant, Marion D.	Westville	La Porte
Wynegar, David E.	Richmond	Wayne-Union
Wynn, Justice F.	Evansville	Vanderburgh
Wyttenbach, John E.	Indianapolis	Marion

Y

Yacko, Michael L.	Indianapolis	Marion
Yale, Charles A.	Fairmount	Grant
Yanson, Mannfredo R. S.	Oxnard, Calif.	Lake
Yast, Charles J.	Gary	Lake
Yegerlehner, Roscoe S.	Kentland	Jasper-Newton
Yingling, Robert J.	Indianapolis	Marion
Yocum, Paul S., Sr.	Gary	Lake
Yocum, Paul S., Jr.	Gary	Lake
Yocum, William S.	Gary	Lake
Yoder, C. Richard	Elkhart	Elkhart
Yoder, Dewey D.	Pierceton	Whitley
Yoder, Richard P.	Bluffton	Wells
Young, C. Curtis	Evansville	Vanderburgh
Young, George M.	Gary	Lake
Young, Gerald S.	Muncie	Delaware-Blackford
Young, James W.	Indianapolis	Marion
Young, John E.	Indianapolis	Marion
Young, John M.	Indianapolis	Marion
Young, John T.	Indianapolis	Marion
Young, Joseph	Greenwood	Johnson
Young, Ralph H.	Goshen	Elkhart
Young, Robert G.	Marion	Grant
Young, Robert L.	Gary	Lake
Yunker, Philip E.	Howe	LaGrange

Z

Zalac, Donald A.	Michigan City	La Porte
Zallen, Stanley G.	East Chicago	Lake
Zaring, Byron K.	Columbus	Bartholomew-Brown
Zehr, Noah (S)	Fort Wayne	Allen
Zeiger, Irvin L.	South Bend	St. Joseph
Zeitler, Philip S.	Elkhart	St. Joseph
Zell, Evertson H.	Indianapolis	Marion
Zeps, E. Frances	Indianapolis	Marion
Zerfas, Charles P. A.	Beech Grove	Marion
Zerfas, Phyllis K.	Indianapolis	Marion
Zeier, Francis G.	Evansville	Vanderburgh
Zierer, Reuben O.	Rockville	Parke-Vermillion
Zimmer, Henry J.	Mishawaka	St. Joseph
Zimmerman, Harold	Evansville	Vanderburgh
Zimmerman, Wm. H.	Syracuse	Elkhart
Zink, Robert O.	Madison	Jefferson-Switzerland
Ziperman, H. Haskell	APO 757, New York, N. Y.	Marion
Ziss, Robert C.	Evansville	Vanderburgh
Zore, Joseph J.	Richmond	Wayne-Union
Zucker, Edward	Gary	Lake
Zweig, Elmer S.	Fort Wayne	Allen
Zwerner, Paul F.	Terre Haute	Vigo
Zwick, Harold F.	Decatur	Adams
Zwickel, Ralph E.	Evansville	Vanderburgh

ROSTER OF MEMBERS BY COUNTIES

Physicians are listed in the county medical society in which they hold membership.

(Paid-up members of the Indiana State Medical Association as of May 1, 1963.)

ADAMS COUNTY

Berne

Beaver, Norman E.....165 W. Water St.
Boze, Robert L.....265 W. Water St.
Luginbill, Howard M.....165 S. Jefferson St.

Decatur

Burk, James M.....115 N. Third St.
Carroll, John C.....226 S. Second St.
Freeby, C. William.....227 S. Second St.
Girod, Arthur H.....203 N. Twelfth St.
Kohne, Gerald J.....134 S. Third St.
Parrish, Richard K.....238 S. Second St.
Reppert, Roland L.....222 S. Second St.
Rich, Norval.....415 W. Madison St.
Zwick, Harold F.....227 S. Second St.

Terveer, John B., 109 E. Willow St., Pomona, Calif.

ALLEN COUNTY

Fort Wayne

A

Adams, E. Wade.....3124 E. State St.
Ahlbrand, Roland C.....1417 N. Anthony Blvd.
Aiken, Arthur F.....1923 E. State Blvd.
Aiken, Nevin E.....1923 E. State Blvd.
Anderson, Ernest.....4349 S. Anthony
Andrew, Jerald L.....2423 S. Calhoun St.
Arata, Justin E.....3124 E. State St.
Ashman, William C.....2902 S. Fairfield Ave.
Aust, Charles H.....Lutheran Hospital

B

Bahr, Robert E.....533 W. Washington St.
Bailey, Paul P.....206 Medical Center Bldg.
Ball, John R.....320 Medical Center Bldg.
Ball, Margaret J.....4112 S. Harrison Blvd.
Baltes, Joseph H.....821 Broadway
Barch, John W.....1301 S. Harrison St.
Bash, Wallace E.....2902 Fairfield Ave.
Baumgartner, Jeraldine.....515½ W. Wayne St.
Beams, Ralph H.....715 Medical Center Bldg.
Beierlein, Karl M.....3124 E. State St.
Beights, Raymond S.....3310 E. State St.
Bergendahl, Emil H.....102 Medical Center Bldg.
Berghoff, James R.....306 E. Jefferson St.
Beutler, Theodore V.....527 W. Berry St.
Billingsley, John S.....2902 Fairfield Ave.
Blichert, Peter A.....334 Medical Center Bldg.
Blosser, Howard V. (S)
1122 W. Washington Blvd.
Bolman, Ralph M.....717 Broadway
Bossard, John W.....115 Medical Center Bldg.
Bowers, Gah T.....1417 N. Anthony Blvd.
Bowers, Jesse W. (S).....418 Gettle Bldg.
Brandt, William E.....228 Medical Center Bldg.
Braunlin, Robert J.....418 Medical Center Bldg.
Bridges, William L.....520 Medical Center Bldg.
Bromley, Luman W.....2730 E. State St.
Brosius, Robert H. W.....1603 Wells St.
Brown, Frederic W.....2609 Fairfield Ave.
Bryan, Franklin A.....512 Medical Center Bldg.
Brucker, Perry A.....403 Medical Center Bldg.
Buckner, George D.....1003 Fulton St.
Burkhart, Charles A.....1301 S. Harrison

C

Carlo, Ernest R. (S).....2902 Fairfield Ave.
Cartwright, Emor L. (S).....3718 Hiawatha Blvd.
Chambers, Alan R.....601 W. Wayne St.
Chase, James A.....1635 Broadway
Clark, William R.....3622 S. Calhoun St.
Cochran, Harry A., Jr.....1301 S. Harrison St.
Conley, John E.....620 W. Berry St.
Connelly, Richard D.....810 Lake Ave.
Cooney, Charles J.....527 W. Berry St.
Cottrell, Robert F.....234 Medical Center Bldg.
Craig, Richard M.....2902 Fairfield Ave.
Culp, John E.....2902 Fairfield Ave.

D

Datzman, Richard C.....520 Medical Center Bldg.
Davidoff, Manuel A.....3610 Brooklyn Ave.
Ditton, Irvin W. (S).....1214 E. Wayne St.
Duemling, Arnold H.....6526 Upper Huntington Rd.
Dunstone, Harry C.....502 Medical Center Bldg.

E

Elston, Lynn W.....604 Medical Center Bldg.
Elston, Ralph W.....604 Medical Center Bldg.
Emenhiser, John L.....1407 Pinehurst Dr.
Engleman, Reinhold.....1301 S. Harrison

F

Farquhar, John S.....4628 S. Calhoun St.
Ferguson, Arthur N.....2902 Fairfield Ave.
Fichman, Abraham M.....323 W. Berry St.
Flaherty, Robert A.....2902 Fairfield Ave.
Franke, Gordon R.....1202 E. State Blvd.
Frankhouser, Charles M. A.
520 Medical Center Bldg.
Fullam, Richard G.....234 Medical Center Bldg.

G

Garton, Harry W.....R. R. 6, Hamilton Rd.
Gastineau, David C.....520 Medical Center Bldg.
Gentile, Jonathan P.....2156 Fairfield Ave.
Gerding, William J.....2638 S. Anthony Blvd.
Giffin, Charles S.....102 Medical Center Bldg.
Gladstone, Naf H.....335 W. Berry St.
Glassley, Stephen H.....1923 E. State St.
Glock, Homer E. (S).....324 Medical Center Bldg.
Glock, Maurice E.....229 Medical Center Bldg.
Glock, Wayne R.....2609 Fairfield Ave.
Goebel, Carl W.....327 W. Creighton
Gould, John C.....2424 Fairfield Ave.
Graham, George M.....1301 S. Harrison St.
Graham, James C.....805 E. Creighton Ave.
Grant, Albert J.....1416 N. Anthony Blvd.
Green, Robert F.....324 W. Berry St.
Greenlee, Robert L.....1110 W. Washington Blvd.
Griest, Walter D.....3024 Fairfield Ave.
Griffith, Harold R.....520 Medical Center Bldg.

H

Hackett, Walter G.....6028 U. Huntington Rd.
Haffner, Herman G.....202 E. Jefferson St.
Haley, Alvin J.....533 W. Washington Blvd.
Hall, William R.....234 Medical Center Bldg.
Haller, Richard C.....3124 E. State St.
Hamilton, Emory D.....234 Medical Center Bldg.
Hamilton, George M.....3124 E. State St.
Harshman, Louis P. (S).....Veterans Hospital
Harvey, Harry C.....406 W. Berry St.
Hasewinkle, August M.....2828 E. State Blvd.
Hastings, Warren C.....815 Ewing St.
Hattendorf, Anton P.....725 Medical Center Bldg.
Havens, Russell E.....228 Medical Center Bldg.
Hershberger, Philip G.....2609 Fairfield Ave.

Hickman, Donald M.....3408 N. Anthony Blvd.
Hillery, Robert L.....810 W. State Blvd.
Hipskind, Richard E.....332 E. Pontiac
Hoffman, Arthur F.....519 Medical Center Bldg.
Holsinger, Robert E.....115 Medical Center Bldg.
Howe, Fordyce L.....1525 Oxford St.
Humphreys, John L.....1301 S. Harrison St.

I

Irmscher, George W.....1417 N. Anthony Blvd.
Isenogle, Kenneth F.....418 Medical Center Bldg.

J

Jackson, John F.....519 Medical Center Bldg.
Johnston, Richard M.....519 Medical Center Bldg.
Jontz, Joe G.....3124 E. State St.
Jontz, Richard L.....520 Medical Center Bldg.
Juergens, Richard B.....1709 Prairie Lane
Jurgensen, Walter T.....3415 Fairfield Ave.

K

Karol, Herbert J.....324 Medical Center Bldg.
Kaufman, Julian R.....3124 East State St.
Keck, Carleton A.....2902 Fairfield Ave.
Kent, Richard N.....731 Medical Center Bldg.
Keyes, Robert C.....3714 S. Calhoun
Kidder, Orva T.....Irene Byron Hospital
Kilgore, Byron W.....227 E. Washington Blvd.
Kimbrough, Robert F.....2730 E. State St.
Kleifgen, William A.....446 W. Pontiac St.
Kleopfer, Ronald G.....3124 E. State St.
Klooze, Kenneth W.....3610 Brooklyn Ave.
Knight, Lewis W.....3124 E. State St.
Krueger, John E.....204 E. Suttenfield
Kruse, Walter E.....410 McKinnie

L

Ladig, Donald S.....337 E. Berry St.
Laker, Gene C.....2407 Fairoak Dr.
Laker, Richard J.....2407 Fairoak Dr.
Lampe, Elfred H.....2902 Fairfield Ave.
Land, Francis L.....4628 S. Calhoun
Laycock, Richard M.....6642 St. Joe Road
Leming, Ben L.....2902 Fairfield Ave.
Lenk, George G.....1805 E. Washington St.
Lloyd, Robert P.....723 Fulton St.
Logan, Richard S.....3124 E. State St.
Lohman, Robert M.....4017 S. Wayne St.
Lorman, James G.....520 Medical Center Bldg.
Loudermilk, Jack L.....520 Medical Center Bldg.
Lyon, William C.....710 W. Wayne St.

M

Mackel, Frederick O.....2609 Fairfield Ave.
Manning, George C.....534 W. Berry St.
Marshall, Caesar L.....438 E. Lewis St.
Mastrangelo, M. J.....418 Medical Center Bldg.
McArdle, Edward G.....2201 S. Calhoun St.
McCallister, John W.....3124 E. State St.
McCoy, Roy R.....3701 S. Harrison St.
McDowell, George A.....215 Medical Center Bldg.
McEachern, Cecil G.....2424 Fairfield Ave.
McKeeman, Donald H.....633 W. Wayne St.
Mensch, James R.....2120 Forest Park
Mercer, Samuel R.....702 Medical Center Bldg.
Meyer, Herman A.....1030 W. Wayne St.
Meyer, Theodore O.....622 Medical Center Bldg.
Michaelis, Stephen C.....3610 Brooklyn Ave.
Miller, Don E.....2902 Fairfield Ave.
Miller, Edward D.....1402 E. State Blvd.
Miller, H. Paul.....2715 Broadway
Miller, Mahlon F.....222 Medical Center Bldg.
Miller, Orval J.....324 W. Berry St.
Miller, Richard H.....511 W. Wayne St.
Miller, Robert B.....3124 E. State St.
Miller, William J.....2902 Fairfield Ave.
Moats, Carl F.....4007 S. Wayne St.
Moats, George E. (S).....615 E. Washington Blvd.
Moeller, Victor C.....2424 Fairfield Ave.
Moravec, Arthur E.....705 Lincoln Tower
Morey, Edwin E.....2902 Fairfield Ave.
Morgan, Milton M.....1147 S. LaFayette St.
Mortenson, Leland J.....3610 Brooklyn Ave.
Mueller, Lawrence W.....533 W. Washington Blvd.
Murdock, Harvey L. (S).....417 Medical Center Bldg.

N-O

Nill, John H.....204 E. Suttenfield St.
Nolan, Gerald R.....1626 Oxford St.
O'Brian, John F.....1807 E. Washington Blvd.
O'Rourke, Carroll.....604 W. Berry St.
Oyer, John H.....416 Medical Center Bldg.

P

Painter, Donald S.....222 Medical Center Bldg.
Parker, Carey B.....1105 S. Harrison St.
Parrot, Donald J.....810 W. State St.
Patterson, Jack W.....717 Broadway
Pauly, Leonard R.....2224 Springfield
Pearson, Huey L.....1801 S. Hanna
Perrin, Kermit F.....2701 S. Anthony Blvd.
Perry, Frederic G.....2902 Fairfield Ave.
Phelps, William J.....2828 E. State Blvd.
Pickett, Merle E.....228 Medical Center Bldg.
Popp, Milton F.....606 Medical Center Bldg.
Powell, M. Jack.....730 W. Berry St.
Priddy, Marvin E.....5010 Riviera Court

Q-R

Rank, William B.....527 West Berry St.
Ray, Herbert A. (S).....402 Medical Center Bldg.
Reed, John D.....3124 E. State St.
Rissing, Walter J.....229 W. Berry St.
Rockey, Noah A. (S).....1224 E. State
Roser, Arthur J.....617 W. Washington Blvd.
Rossiter, Dudley L.....3629 S. Harrison
Rothberg, Maurice.....625 W. Berry St.
Rousseau, John W.....3124 E. State St.

S

Sahlmann, Hans.....3418 S. Hanna
Salon, Harry W.....535 W. Berry
Salon, Joel W.....604 W. Wayne St.
Salon, Nathan L.....604 W. Wayne St.
Sarver, Francis E.....320 Medical Center Bldg.
Savage, Arthur R.....302 W. Berry St.
Schlademan, Karl R.....520 Medical Center Bldg.
Schloss, Robert P.....3504 Quimby Arcade
Schmidt, Eugene E.....228 Medical Center Bldg.
Schmoll, Robert J.....515 W. Wayne St.
Schneider, Louis A.....730 W. Berry St.
Schoen, Frederic L.....902 W. Wayne St.
Schubert, Jerome C.....2154 Fairfield Ave.
Scoins, William H.....1301 S. Harrison St.
Scott, H. Vaughn.....3718 Knoll Crest Dr.
Senseny, Eugene F.....2902 Fairfield Ave.
Shaw, James E.....3610 Brooklyn Ave.
Shinabery, Lawerence.....1850 Broadway
Short, John T. (S).....2902 Fairfield Ave.
Shugart, Robert R.....2609 Fairfield Ave.
Singer, Elmer C. (S).....310 Medical Center Bldg.
Smith, Philip L.....2902 Fairfield Ave.
Smith, Richard B.....3124 E. State St.
Smith, Roger C.....3124 E. State St.
Snyderman, Sanford C.....102 Medical Center Bldg.
Somers, Gerald H.....3610 Brooklyn Ave.
Spencer, C. Herbert.....519 Medical Center Bldg.
Stanley, Robert G.....3415 S. Fairfield Ave.
Stauffer, Richard C.....2730 E. State St.
Steigmeyer, David J.....3124 E. State St.
Stier, Paul L.....721 Broadway
Stucky, Jerry L.....5010 Riviera Court
Sullivan, Robert E.....2424 Fairfield Ave

T

Taylor, Robert G. 2902 Fairfield Ave.
Tennant, David L. 1832 S. Calhoun
Terrill, Richard W. 446 W. Pontiac
Thimlar, James W. (S) 602 E. Lewis
Tomusk, August N. 418 Medical Center Bldg.
Trier, Herbert P. 612 Medical Center Bldg.

U

Ungemach, Willo F. 332 Pontiac

V-W

Walker, Floyd B. 3505 S. Monroe
Wallace, Collins R. 4188 Buesching Dr.
Ward, Gerald F. 3124 E. State St.
Ward, Paula B. 4420 Highwood
Warfield, Chester H. 730 W. Berry St.
Weber, John R. 710 W. Wayne St.
Wick, Alfred A. 731 Medical Center Bldg.
Williams, Berniece M. 801 E. State Blvd.
Wilson, Leslie Veterans Hospital
Wilson, Roland B. 1207 S. Lafayette
Worley, Ansel C. 317 Medical Center Bldg.
Wright, William C. 621 Medical Center Bldg.
Wyatt, James L., III 310 E. Washington St.

X-Y-Z

Zehr, Noah (S) 301 W. Creighton
Zweig, Elmer S. 344 W. Berry St.

Emme, Richard W. Harlan
Harless, Fred Monroeville
Ponczek, Edward J. Monroeville

New Haven

Dahling, Clemens W. Dahling Bldg.
Dahling, Fred W. Dahling Bldg.
Emenhiser, Donald C. 608 State St.
Hoetzer, Eldore M. 502 Henry
Sidell, James P. 630 Broadway
Stumpf, Edwin E. 716 Broadway
Wade, Reynolds W. 1018 Bell Ave.

Miller, Kenneth D. Woodburn

Helmer, Frederic A.
2057 Snowhill Dr., Cincinnati, Ohio
Philbert, Richard N.
4370 Alta Mesa Dr., Redding, Calif.
Prentiss, Nelson H. V. A. Hospital, Oteen, N. C.
Schellhouse, Earl M.
V.A. Hospital, Jefferson Barracks, St. Louis, Mo.
Sherwood, Clarence E.
R. R. 2, Box 97A, Madison, So. Dakota
Vogel, Lloyd A. 3301 Patton Dr., Indianapolis, Ind.
Voorhees, Robert J. 601 S. Brentwood, Clayton, Mo.

BARTHOLOMEW-BROWN COUNTIES

Columbus

Able, Walter 2760 25th St.
Adler, David L. Bartholomew County Hospital
Andrews, Fred B. 1919 25th St.
Beggs, Lowell F. 832 Washington St.
Clay, Eleanor 2739 Central Ave.
Daugherty, Forest D. 2438 Cottage Ave.
Davis, Marvin R. 908 Washington St.
Dugan, Thomas Doctor's Park
Echsner, Herman J. Doctor's Park
Fisher, Walter S. 422 Ninth St.
Fuller, Robert G. 1919 25th St.
Gammell, Lindley L. 602 22nd St.
Hart, Robert B. 712 Washington St.
Hauersperger, Alfred D. 2760 25th St.
Hawes, James K. (S) P. O. Box 308
Hawes, Marvin E. 522 Seventh St.
Henry, Alvin L. 621 Franklin St.
Jacobs, E. Robert 2760 25th St.
Knotts, Halleck S. 1813 25th St.
Krueger, Robert B. 2739 Central Ave.
Macy, George W. 2760 25th St.
Marr, Griffith R. R. 1
McCullough, Henry G. R. R. 4
Mohler, Floyd W. 2739 Central Ave.
Norton, Harold J. 909 Pearl St.
O'Bryan, Richard B. 2739 Central Ave.
Overshiner, Lyman (S) 503 California
Ranck, Benjamin A. 2438 Cottage Ave.
Rau, Charles A. 2438 Cottage Ave.
Reid, Robert M. 2225 Central Ave.
Richmond, Harold W. Cummins Engine Co., Inc.
Ryan, William J. 911 Washington St.
Schmitt, Richard K. 423 Ninth St.
Sigmund, William B. 2355 Central Ave.
Snapp, Richard A. 2225 Central Ave.
Teal, Dorothy D. 728 Franklin St.
Warshaw, Seymour 2760 25th Street
Weinland, George C. R. R. 5, Harrison Lake
Wickstrom, Otto W. 718 Washington St.
Williams, Everett W. 2225 Central Ave.
Zaring, Byron K. 718 Washington St.

Schneider, Kenneth D. Nashville
Seibel, Robert M. Nashville

BENTON COUNTY

Taylor, Wade H. (S) Ambia
Leak, Robert H. Boswell
Coddens, Avery L. Earl Park
Altier, William H. Fowler
Miller, Dan T. (S) Fowler
Turley, Verne L. Fowler
McKinney, Donald L. Otterbein
Byrn, Howard W. (S) Oxford
Scheurich, Virgil Oxford
Rutherford, Charles E.
5471 W. 71st St., Indianapolis (68)

BLACKFORD COUNTY

(See **Delaware-Blackford**)

BOONE COUNTY

Schaaf, Alvin D. Jamestown

Lebanon

Beck, Herma A. (S) Boone County Bank Bldg.
Boyer, Don W. 1125 N. Lebanon St.
Coons, John D. Boone County Bank Bldg.
Coons, Ritchie 303 W. Washington St.
Grigsby, Hardin B. 916 N. East St.
Headley, Lloyd M. 1111 N. Lebanon St.
Honan, Paul R. 1720 N. Lebanon St.
Kern, Clarence G. 1720 N. Lebanon St.
Lenox, Jack 303 W. Washington St.
Porter, Jack 209 W. North St.
Weddle, Charles O. 905 N. Lebanon St.
Wiseheart, Robert H. 905 N. Lebanon St.

Bassett, Margaret A. Thorntown
Gregg, Edwin E. Thorntown
Lovett, Harvey D. Whitestown
Bailey, Lawrence S. Zionsville
Harvey, Ralph J. (S) Zionsville

BROWN COUNTY

(See **Bartholomew-Brown**)

CARROLL COUNTY

Kennedy, Eva N. (S) Camden
Wise, Charles L. Camden

Delphi

Baker, Eldon E. 109 S. Union
Crampton, Charles C. (S) 115 E. Main St.

Petry, T. Neal.....111 E. Franklin St.
Seese, Robert M.....101 W. North St.
Wagoner, George W.....Front & Union Sts.

Adams, Max R.....Flora
McLaughlin, James R.....Flora

CASS COUNTY

Dutchess, C. Toney.....Galveston

Logansport

Adamski, Michael S.....408 North St.
Bailey, Earl W.....212 Fifth St.
Ballard, Charles A (S).....325½ E. Market St.
Bean, Joseph S.....Memorial Hospital
Burnett, Paul C.....Logansport State Hosp.
Cheng, Sylvia F.....Logansport State Hosp.
Chu, Johnson C. S.....Logansport State Hosp.
Cobb, Clarence M.....Memorial Hosp.
Davis, John C. (S).....Masonic Temple
Eckert, Russell A.....1101 Michigan Ave.
Fitzgerald, Brice E.....126 Fourth St.
Fogel, Ernest.....Logansport State Hosp.
Gatzimos, Christos D.....1101 Michigan Ave.
Glendening, Richard L.....420 A High St.
Hall, Bernard R.....422 High St.
Harrington, James F.....1001 E. Broadway
Hedde, Eugene L.....211 S. Third St.
Hillis, Lowell J.....718 East Broadway
Hochhalter, Marian.....86 9th St.
Horning, Richard R.....Logansport State Hospital
Jones, J. Carl.....422 North St.
King, Jay M.....812 North St.
Mackey, Colonel G. (S).Logansport State Hospital
Maschmeyer, Robert H.....Logansport State Hosp.
Morrical, Russell J.....212 Fifth St.
Parker, E. Camille.....2500 E. Broadway
Parker, Francis W., Jr.....2500 E. Broadway
Pfuetze, Max.....408 North St.
Phipps, Elwood B.....Logansport State Hosp.
Schenck, Foss (S).....Logansport State Hosp.
TerBush, Edward L.....216 9th St.
Viney, Charles L.....Masonic Temple
Wilson, Paul H.....422 North St.
Winter, Donald K.....422 North St.

Newcomb, William K.....Royal Center
Flanagan, Estle P. (S).....Walton
Lybrook, Daniel E. (S).....Young America
Jewell, Earl B. (S)
3136 Oakhill Dr., Birmingham, Mich.

CLARK COUNTY

Charlestown

Goodman, Eli.....807 High St.
Jones, David H.....935 Water St.
Marshall, Thomas J. (S).....807 High St.
Shina, Heskel S.....619 Eastern Blvd.

Clarksville

Mudd, Joseph P.....630 Eastern Blvd.
Willner, Alan.....647 Eastern Blvd.
Wolverton, George M.....647 Eastern Blvd.

Carr, Joseph H.....Henryville
Greene, William R.....Henryville

Jeffersonville

Adair, Samuel L.....201 E. Market
Baldwin, John H. (S).....425 Meigs Ave.
Bizer, Mier A.....119 Forest Oak Park
Bruner, Ralph W. (S).....437 Spring St.
Buehler, George M.....431 Locust St.
Byrd, Ryland P.....210 Sparks Ave.
Carlberg, Dale L.....226 E. Maple
Carney, Joel T. (S).....347 Spring St.
Clark, William B., Jr.....435 Spring St.
Corrao, Thomas J.....435 Spring St.
Dare, Lee A.....209 E. Maple St.
Ely, Cecil W.....Clark Co. Memorial Hospital
Forsee, Norman E.....211 E. Market St.
Havens, A. Lyle.....432 Wall St.
Havens, Thomas R.....432 Wall St.
Huoni, John S..1405 Youngstown Shopping Center
Isler, Nathaniel C.....519 Spring St.
Johnson, Jerome M.....1426 Gateway Plaza
McKechnie, Robert K.....432 Wall St.
Oca, Clemente F.....437 Spring St.
Reed, Edsel S.....Clark Co. Memorial Hosp.
Roby, Alma L.....201 E. Market St.
Shaw, Houston W.....435 Spring St.
Weems, Mallory P.....404 Spring St.
Witt, William R.....Medical Center

Sellersburg

Meyer, Claude J.....119 S. Indiana Ave.
Regan, George L.....115 N. Indiana Ave.
Sturgis, Donald G.....Box 156

CLAY COUNTY

Brazil

Farid, Rahim S.....111 N. Walnut St.
Garvin, Donald B.....111 N. Walnut St.
Maurer, J. Frank.....111 N. Walnut St.
Maurer, Robert M.....111 N. Walnut St.
McCormick, Wilbur C.....R. R. No. 2
Mehne, Richard G.....1½ E. National Ave.
Shattuck, John C.....1½ E. National Ave.
Weaver, Timothy M. (S).....Brazil Trust Bldg.
Webster, Robert K.....28 N. Franklin St.
Wood, Opal L.....111 N. Walnut St.

Moon, Charles E.....Center Point
Bond, Walter C.....Clay City
Buell, Forrest R.....Clay City

CLINTON COUNTY

Waits, Chester L.....Colfax

Frankfort

Applegate, Albert E.....1303 S. Jackson St.
Beardsley, Frank A.....400 Kentwood Dr.
Carrel, Francis E.....209 S. Columbia St.
Dykhuizen, Theodore A.....201 W. Walnut St.
Erdel, Milton W.....2 E. White St.
Flora, Fred W.....1256 S. Jackson St.
Hammersley, George K.....361 E. Clinton St.
Hedgcock, Robert A.....259 E. Clinton St.
Stout, Harry T.....1256 S. Jackson St.
Van Kirk, Paul P.....1252 S. Jackson St.
Williams, Earl K.....Clinton Co. Hospital
Work, Bruce A.....306 Peoples Life Bldg.

Bush, Charles E.....Kirklin
Carlyle, Ivan E. (S).....Michigantown
Grove, Robert H.....Rossville
Ketcham, John S. (S).....Rossville
Weller, Ralph D.....Rossville

Holmes, Claude D. (S)
329 Romano St., Coral Gables, Fla.

CRAWFORD COUNTY

(See **Harrison-Crawford**)

DAVIESS-MARTIN COUNTIES

Rohrer, James R.....Elnora

Loogootee

Chattin, Robert E.....102 Wood
Lett, Emory B.....408 E. Main

Sears, Don.....Odon

Washington

Arthur, Nora M. (S).....R. R. 4
Blazey, Arthur G.....7 E. Walnut St.
Chattin, Vance J.....514 E. Main St.
Farris, John J.....514 E. Main St.
Fox, C. Philip.....305 Peoples Bank Bldg.
Lalonde, Alban.....1312 Bedford Road
Lindsay, Hamlin B.....511 E. Main St.
McKittrick, Jack.....Peoples Bank Bldg.
McNaughton, Lawrence M.....400 E. Hefron St.
Norton, Horace O.....511 E. Hefron St.
Rang, A. A. (S).....211 N. E. 9th St.
Rang, Robert H.....1312 Bedford Rd.
Ross, Glenn E.....1307 Bedford Road
Schafer, William C.....1312 Bedford Rd.
Schroeder, Henry R.....101 N. E. First St.
Seat, Marshall H.....2 East Walnut St.

DEARBORN-OHIO COUNTIES

Aurora

Baker, Leslie M.....501 Fourth St.
Jackson, John K.....223 Mechanic St.
Olcott, Charles W.....203 Main St.
Treon, James F. (S).....505 Fifth St.

McNeely, Matthew J.....Dillsboro
Elliott, John C. (S).....Guilford

Lawrenceburg

Aldred, Allen W.....370 Bielby Road
Conrad, Henry W.....370 Bielby Road
Fagaly, William J.....238 Short St.
Frable, Frank L.....370 Bielby Road
Houston, Fred D. 30 W. High St.
Hunter, Lowell G.....370 Bielby Road
Lindgren, Ivan T.....370 Bielby Road
Morrison, George G., Jr.....209 Fourth St.
Pfeifer, James M.....319 Front St.
Rhodes, Alfred K.....370 Bielby Rd.
Streck, Francis A.....326 Walnut St.
Turner, David D.....6 West High St.
Weisenberger, Brockton L.....370 Bielby Road

Fessler, Gordon S.....Rising Sun

DECATUR COUNTY

Tremain, Milton A. (S).....Adams

Greensburg

Acher, Robert P.....221 E. Washington St.
Callaghan, Winship C.....304 Bates Bldg.
Dickson, Dale D.....Bates Bldg.
Miller, James C.....205 Bates Bldg.
Morrison, James T.....207 N. Franklin
Overpeck, Charles.....Murphy Bldg.
Shaffer, William R.....214 N. Franklin
Walker, Louis.....215 N. Franklin

Harkcon, Harry E.....St. Paul
Porter, Edward A. (S).....Westport
Porter, Robert A.....Westport

DE KALB COUNTY

Auburn

Covell, Harry M.....127 W. Seventh St.
Geisinger, Lewis N. (S).....805 S. Indiana Ave.
Harvey, John C.....405 S. Main St.
Hines, Archie V. (S).....401 S. Main St.
Hines, John H.....403 S. Main St.
Hippensteel, Harland V.....208 W. Seventh St.
Nugen, Harold.....223 W. Seventh St.
Rogers, Evered E.....212 W. Sixth St.
Sanders, Jesse A. (S).....1007 S. Main St.
Souder, Bonnell M. (S).....206 W. Seventh

Wills, Max 347 W. Seventh St.

Shultz, Clifford Butler
Weirich, Charles I.....Butler

Garrett

Carpenter, Ramesh S.....514 S. Randolph
Jinnings, Loren E.....200 S. Randolph
Kantzer, Floyd B.....200 S. Randolph
Nason, Robert A.....123 E. King
Novy, Charles A.....200 S. Randolph
Reynolds, R. Perry.....215 S. Randolph

Coleman, Floyd B.....Waterloo
Showalter, John P.....Waterloo

DELAWARE-BLACKFORD COUNTIES

Brown, Stewart D.....Albany
Puterbaugh, Karl E.....Albany
Mathewson, Russell C...1010 Jackson St., Anderson
Hurley, John R.....Daleville
Tucker, Oral A.....Daleville
Advincula, Luis.....Eaton
Ko, Richard C. B.....Gaston

Hartford City

Dodds, James U.....227 W. Main St.
Dudgeon, Charles A.....720 N. Spring
Jackson, Dean B.....401 W. Washington St.
Owsley, Guy A.....214 N. High St.
Parks, George O.....720 N. Spring St.
Weldy, Bryce P.....227 W. Franklin St.
Werry, Leslie E.....218 W. Washington St.
Wierzalis, Edward F.....Rural Loan Bldg.

Burns, Paul E.....119 W. High St., Montpelier
Ingram, Richard
124 S. Washington St., Montpelier

Muncie

Adams, Julia L.....4608 W. Jackson St.
Adams, William B.....4608 W. Jackson St.
Alvey, Charles R.....217 S. Cherry St.
Ball, Clay A. (S).....303 W. Adams St.
Ball, Philip 2600 W. Jackson St.
Benken, Lawrence D.....2423 W. Jackson
Bergwall, Warren L.....223 Tillotson Ave.
Bibler, Henry E.....311 W. Adams St.
Botkin, Charles (S).....508 W. Jackson St.
Botkin, Clyde G.....508 W. Jackson St.
Botkin, Thomas.....400 White River Blvd.
Brown, Leland G.....412 White River Blvd.
Brown, Thomas M.....412 White River Blvd.
Burwell, Stanley W.....424 W. Jackson St.
Butterfield, Robert M.....315 W. Jackson St.
Butz, Ralph O.....1525 W. Jackson St.
Clark, Robert M.....321 University Ave.
Clevenger, Joseph H.....424 W. Jackson St.
Cochran, Robert B.....1111 W. Jackson St.
Collins, Margaret C.....Ball Memorial Hospital
Cooper, John.....2327 Madison St.
Covalt, Wendell E..... 2724 W. North St.
Crates, Gordon C.....Ball Memorial Hospital
Cullison, John L.....2724 W. North St.
Cure, Elmer T.....105 Western Reserve Bldg.
David, George J.....2200 Janney Ave.
Davis, Edgar C. (S)....203 Western Reserve Bldg.
Deutsch, William.....406 White River Blvd.
Dietz, David J.....Ball Memorial Hospital
Doles, Ted S.....Ball Memorial Hospital
Dunning, Thomas W.....400½ White River Blvd.
Egger, Ross L.....Ball Memorial Hospital
Fiederlein, Frederick J.....808 W. Jackson
Galliher, Marjorie J.....410 White River Blvd.
Garling, Luvern C.....521 S. Tillotson
Geckler, Charles E.....205 Western Reserve Bldg.
Gibson, Robert K.....806 West Jackson St.
Gill, Thomas A.....808 W. Jackson St.

Gray, William J. Ball Memorial Hospital
Greiber, Marvin F. 420 W. Washington St.
Gustafson, Milton 808 W. Jackson St.
Hall, Robert S. 514 Wysor Bldg.
Harvey, Emerson C. Jr. .. Delco Battery Operations
Hayes, Theodore R. 210 S. High St.
Henderson, Ramon A. 806 W. Jackson St.
High, Ralph L. 420 W. Washington St.
Holmes, John L. 412 White River Blvd.
Hostetter, Irwin S. 115 N. Cherry St.
Imhof, Joseph D. 320 W. Adams St.
Kalker, Morton Ball Memorial Hospital
Kammer, Grace C. 1005 W. Parkway Dr.
Kammer, Walter F. 420 W. Washington St.
Kim, Joon S. Ball Memorial Hospital
Kirshman, Forrest E. 211 S. High St.
Koch, Edwin F., Jr. Ball Memorial Hospital
Koss, K. William 1600 W. Jackson St.
Kress, James W. 1111 W. Jackson St.
Lowry, Donald J. 420 W. Washington St.
McClellan, John B. Ball State Teachers College
McClintock, James A. 316 W. Adams St.
McCoy, George E. 806 W. Jackson St.
McDowell, Fletcher W. 315 S. Jefferson St.
Montgomery, Lall G. Ball Memorial Hosp.
Moore, Jack C. 412 White River Blvd.
Moore, Thomas C. 110 N. Cherry St.
Moore, Will C. (S) 110 N. Cherry St.
Morris, Jean W. 247 Johnson Bldg.
Nelson, Harold E. 424 W. Jackson St.
Osborne, John V. 420 W. Washington St.
Owens, Thomas R. (S) .. 202 Western Reserve Bldg.
Peacock, Robert C. 2724 W. North St.
Pippenger, Joseph I. 310 W. Jackson St.
Pippenger, Wayne G. .. Ball State Teachers College
Quick, William J. 314 E. Washington St.
Rivers, Glynn A. 625 W. Adams St.
Schoenhals, Charles E. 424 W. Jackson St.
Schulhof, Maurice G. 420 W. Washington St.
Sixbey, Maurice D. Ball Memorial Hospital
Smith, James S. 501 Kirby
Speck, Carlson R. Ball Memorial Hospital
Steele, Frank M. 420 W. Washington St.
Stibbins, Warren 2605 Wheeling Ave.
Stout, Francis E. 2423 W. Jackson St.
Stump, Richard L. 2000 S. Madison
Taylor, Donald R. Ball Memorial Hosp.
Tharp, Donald W. 1517 N. Tillotson
Tomlin, Hugh M. 420 W. Washington St.
Venis, Kemper N. 108 N. Liberty St.
Voss, Gert 420 W. Washington St.
Walker, Jack M. 412 White River Blvd.
Ware, Herbert E. 2200 Janney Ave.
Young, Gerald S. 924 W. Main St.

Hinchman, Jean F. Parker
Hill, Robert E. Yorktown
Moss, Mavor J. Yorktown
Hill, Howard E. P. O. Box 2056, St. Thomas, U. S. Virgin Islands
Morse, Arthur S. 6341 64th Ave., East Riverdale, Maryland

DUBOIS COUNTY

Barrow, John H. Dale
Backer, Henry G. Ferdinand
Bland, Jack D. Holland

Huntingburg

Amini, Sohrab 521 Fourth St.
Bretz, John M. 302 Fourth St.
Craig, Harry L. 409 Van Buren
Scales, Alfred B. 407 Van Buren
Scales, Allen D. 409 Van Buren
Stork, Harvey K. 530 Fourth St.
Williams, Fielding P. 215 W. Walnut St.

Jasper

Beaven, John B. 111 Central Bldg.
Benages, Anthony 948 MacArthur St.
Blessinger, Paul J. 325 E. Sixth St.
Gootee, Francis H. 501 Clay St.
Gootee, Thomas H. 501 Clay St.
Heck, Martin C. 801 Newton
Held, George A. 716 W. Ninth St.
Klamer, Charles H. 715 MacArthur St.
Lukemeyer, St. John 109 W. 12th St.
Ploetner, Edward J. 201 W. Sixth St.
Salb, John P. 106 Metzger Bldg.
Salb, Leo A. (S) 301 E. Sixth St.
Wagner, Arthur L. 115 E. Ninth St.

ELKHART COUNTY

Horswell, Richard G. Bristol
Neidballa, Edward G. Bristol

Elkhart

Arlook, Theodore D. 912 W. Franklin St.
Atwood, William H. 405 S. Second St.
Bender, Robert L. 411 S. Third St.
Benson, James E. 405 S. Second St.
Billings, Elmer R. 405 S. Third St.
Bloom, George R. 506 S. Second St.
Boling, Richard 214 W. Marion St.
Bowdoin, George E. (S) 515 S. Second St.
Campbell, Patrick B. 605 Oakland Ave.
Classen, Pete R. C. 4112 S. Main St.
Compton, Walter A. 2225 Greenleaf Blvd.
Conklin, Raymond L. .. Miles-Ames Research Labs.
Cormican, Herbert L. 1400 Hudson
Dovey, Edward G. 513 Oakland Ave.
Echeverria, Rodolfo E. 405 S. Second St.
Elliott, Thomas A. 405 S. Second St.
Finfrock, James D. 608 West Blvd.
Fleming, Claude F. (S) 217 W. Jefferson St.
Futterknecht, James O. 405 S. Second St.
Gattman, George B. 405 S. Second St.
Graber, Virgil R. 1400 Hudson St.
Gray, Edwin H. 518 W. Franklin St.
Gray, Mary Case 518 W. Franklin St.
Hannah, Jack W. 1906 E. Jackson Blvd.
Harris, Neil 307 S. Seventh St.
Heminway, Norman L. .. Miles-Ames Research Labs.
Hurley, James W. 405 S. Second St.
Ivy, John H. 405 S. Second St.
Keating, John U. 224 W. High St.
Kesim, Mufit 317 W. Lusher Ave.
Kintner, Burton E. 506 S. Second St.
Kistner, Arthur W. 400 Equity Bldg.
Klassen, Otto D. 2600 Oakland
Koehler, Elmer G. 416 W. Lexington Ave.
Krause, Friedrich 4112 S. Main St.
Lundt, Milo O. 521 S. Second St.
Luther, William C. Ames Company, Inc.
McArt, Bruce A. 221 W. Jefferson
Mark, George A. 413 W. Franklin St.
Martin, Paul H. 313 N. Second St.
Mendez, Carlos 116 W. Marion St.
Middleton, Ramona J. 1400 Hudson St.
Miller, Hugh A. 819 McNaughton Ave.
Miller, Samuel T. (S) 506 S. Second St.
Mininger, Edward P. 1400 Hudson
Mishkin, Irving 209 S. Second St.
Norris, Allen A. (S) 401 W. Marion St.
Paff, William A. 115 S. Third St.
Paine, George E. 329 Meisner Ave.
Pancost, Vernon K. 1000 W. Marion St.
Parshall, Dale B. 133 W. Lusher Ave.
Patrick, Glenn B. 405 S. Second St.
Pletcher, William D. 405 S. Second St.
Rouen, Robert 114 Monger Bldg.
Rupe, Lloyd O. 211 S. Fifth St.

Schlosser, Herbert C.....116 W. Marion St.
Sears, Murray M. (S).....304 Equity Bldg.
Spray, Page E.....320 W. High St.
Stauffer, Walter A. (S).....701 Strong Ave.
Stubbins, William M.....412 S. Second St.
Swank, Lucretia R.....1600 E. Jackson Blvd.
Swihart, Danny D.....506 S. Second St.
Swihart, Homer R.....1200 W. Marion St.
Wilson, Orley E.....217 N. Main St.
Work, James A., Jr. (S).....406 S. Second St.
Yoder, C. Richard.....603 Oakland

Goshen

Amstutz, Henry C.....112 W. High Park Ave.
Bartholomew, Mary L.....317 E. Lincoln
Bender, John M.....112 W. High Park Ave.
Bigler, Frederick W.....314 S. Fifth St.
Bosler, Howard A.....214 Waterford Road
Bowser, Philip G.....107 S. Fifth St.
Chandler, Leon H.....112 E. Lincoln Ave.
Hostetler, Carl M.....304 E. Lincoln
Kaufman, Lillie S.....901 Mervin Ave.
Kennedy, Myron S.....314 S. Fifth St.
Krabill, Willard S.....112 W. High Park Ave.
Martin, Floyd S.....127 E. Lincoln
Quilty, Thomas J.....112 E. Madison St.
Smucker, Ernest E.....112 S. Fifth St.
Troyer, Dana.....122 E. Clinton St.
Troyer, George W.....314 E. Lincoln Ave.
Turner, John P.....115 E. Washington St.
Wagner, David G.....307 S. Seventh St.
Westfall, George S.....214 E. Lincoln St.
Young, Ralph H.....113 E. Madison

Massanari, Walter S.....Millersburg
Miller, Donald G.....Middlebury
Teters, Melvin S. (S).....Middlebury
Rheinheimer, Floyd L.....Milford

Nappanee

Kendall, Forest M.....252 W. Market St.
Price, Douglas W.....162 E. Market St.
Roose, Lisle W.....357 N. Nappanee St.
Wenger, James E.....357 N. Nappanee St.

De Fries, John J.....New Paris
Clark, Jack P.....303 S. Hunnington, Syracuse
Craig, Robert A.....P. O. Box 607, Syracuse
Fosbrink, Ephraim L.....107 W. Main St., Syracuse
Zimmerman, William H.....R. R. No. 2, Syracuse
Guttman, John B.....Wakarusa
Miller, James.....Wakarusa

Todd, David D. (S)
5835 Beaumont Ave., La Jolla, Calif.

FAYETTE-FRANKLIN COUNTIES

Kemp, W. Alfred.....1006 N. Main St., Bourbon

Brookville

Foreman, Walter A.....617 Main St.
Peters, Elmer E.....830 Main St.
Seal, Perry F.....901 Main St.
Smith, Herbert N.....812 Main St.

Connersville

Dale, Maxwell H.....818 Grand Ave.
Ellis, George M.....108 E. 10th St.
Gregg, Albert F.....124 E. Sixth St.
Hudson, Arlington M.....321 W. 20th
Kerrigan, William F.....718 Central Ave.
Lockhart, Jack M.....707 W. Third St.
Mountain, Francis B.....930 Central Ave.
Neukamp, Frank H.....707 W. Third St.
Sanders, Bertram W.....930 Central Ave.
Steinem, Joseph L.....812 Grand Ave.
Watterson, Gerald T.....1910 Virginia Ave.
Winklepleck, A. M.....R. R. #6

Poston, Clement L.....R. R. 2, Laurel

FLOYD COUNTY

New Albany

Baker, Avey M.....811 E. Spring St.
Baxter, Samuel M.....1201 E. Spring St.
Bickers, Everett E.....3541 Paoli Pike
Brown, Kenneth H.....410 E. Spring St.
Buchman, Marshall H.....1824 State St.
Cannon, Daniel H.....1203 E. Spring St.
Edwards, William F.....356 Vincennes St.
Garner, William H., Jr.....919 E. Spring St.
Garner, William H., Sr.....919 E. Spring St.
Gentile, John P.....101 Adams St.
Geyer, Joseph H.....Southern Indiana Tuberculosis Hosp.
Harris, Robert W.....2652 Charlestown Rd.
Hauss, Augustus P. (S).....212 Elsby Bldg.
Hess, Paul P.....Floyd Co. Bank Bldg.
Higgins, John R.....700 E. Spring St.
LaFollette, Donald R.....1000 E. Spring St.
LaFollette, Robert E.....1000 E. Spring St.
McCullough, James Y.....700 E. Spring St.
Nedelkoff, Bogdan.....R. R. No. 2, Box 500H
Paris, John M.....602 E. Spring St.
Pierce, Gene S.....1696 Garretson Lane
Robertson, Addis N.....820 E. Spring St.
Robinson, Nan.....1726 State St.
Shelton, Clyde F.....1726 State St.
Sloan, Herbert P.....1207 E. Spring St.
Sonne, Irvin H., Jr.....1850 State St.
Streepey, Jefferson I.....1102 E. Spring St.
Tyler, Frank T. (S).....Hausfeldt Lane
Voyles, Harry E.....213 Elsby Bldg.
Wallace, Elmer L.....1516 State St.
Wolfe, Morton F.....2533 Glenwood Ct.
Wolfe, Nelson.....1117 E. Spring St.
Worley, Henry L.....1104 E. Spring St.

Wohlfeld, Gerald M.....440 N. Winona St., Indianapolis 2

FOUNTAIN-WARREN COUNTIES

Attica

Fisher, John E.....217 S. Perry St.
Maris, Lee J.....201 Brady
Petrich, Peter R.....401 S. Perry St.
Raymundo, Vivencio F.....401 S. Perry St.

Covington

Hoffman, Max N.....416 Union St.
Humphrey, Edward M.....Olin Mathieson Corp.
Stephens, Lowell R.....600 E. Liberty St.
Suzuki, Tsutomu T.....505 Washington St.

Furr, Jack D.....Kingman
Smith, Byron J.....Kingman
McCord, Carl B. (S).....Veedersburg
Person, Theodore C.....Veedersburg
Rusk, Hubert M.....Wallace
Nelson, Carl A.....West Lebanon
Crain, James W.....Williamsport

FULTON COUNTY

Herrick, Charles L.....Akron
Miller, Virgil C.....Akron
Dielman, Franklin C. (S).....Fulton
Kraning, Kenneth K.....Kewanna

Rochester

Herendeen, Elbie V.....120 W. Ninth St.
Richardson, Charles L.....121 W. Eighth St.
Richardson, Joseph D.....121 W. Eighth St.
Rowe, Howard H.....720 Jefferson St.
Rusler, William J.....817 E. Ninth St.
Stinson, Dean K.....816 Main St.

Kelsey, Lawrence E.....102 W. Keim Dr., Phoenix, Ariz.

GIBSON COUNTY

Geick, Raymond G.....Fort Branch
Marchand, Edwin V.....Haubstadt
Petitjean, Harold G.....Haubstadt
Dye, William E.....Oakland City
Ropp, Eldon R. (S).....Oakland City
Kenshol, William S.....Owensville

Princeton

Carpentier, Harry F.....105 E. Broadway
Folck, John K.....115 N. Prince St.
Graves, Orville M. (S).....116 S. Hart St.
McCarty, Virgil.....113 S. Main St.
McElroy, Robert S.....116 S. Main St.
Peck, James F.....218 Broadway
Strickland, Karl S. (S).....230 W. Broadway
Weitzel, Roland E.....114 S. Hart St.
Wells, William R.....109 E. State St.

Brazelton, O. T. (S)
13601 Cedar Crest Lane #100-G, Seal Beach, Calif.

GRANT COUNTY

Grant, M. Arthur.....Fairmount
Henley, Glenn (S).....Fairmount
Yale, Charles A.....Fairmount

Garrison, Leon J.....114 S. First St., Gas City
Koontz, William A.....126 E. Main St., Gas City
Shoemaker, Richard L.
211 E. South "A" St., Gas City

Rhamy, Donald..8448 Spring Mill Ct., Indianapolis
Baskett, Russell J.....Jonesboro

Marion

Abell, Charles F.....500 Wabash Ave.
Alderfer, Henry H.....131 N. Washington St.
Ansbacher, Stefan (H).....Fox Station Rd. W.
Ayres, Wendell W.....500 Wabash Ave.
Bailey, Douglas A.....107 E. 31st St.
Bloom, Asa W.....724 W. Third St.
Boyer, Grace B.....605 Locust St.
Braunlin, Robert F...711 Marion Nat'l Bank Bldg.
Brown, Robert M.....520 Marion Nat'l Bank Bldg.
Comeau, William J.....Marion General Hosp.
Cunningham, Robert D.....500 Wabash Ave.
Daniels, George R. (S).....106 N. E Street
Davis, Joseph B.....131 N. Washington St.
Davis, Merrill S. (S).....131 N. Washington St.
Davis, Richard M.....131 N. Washington St.
Donaldson, Miles.....2927 N. Washington St.
Dunbar, Fred E.....232 S. Miller Ave.
Fisher, Henry.....1502 S. Washington St.
Fuelling, James L.....131 N. Washington St.
Ganz, Max.....930 S. Adams
Gill, Dee D.....Veterans Hospital
Goldsmith, David A.....Veterans Hospital
Hover, Galen M.....Veterans Hospital
Hummel, Russel M.....500 Wabash Ave.
Jarrett, John C.....131 N. Washington St.
Lahr, Richard E.....1121 W. Third St.
Langrall, Harrison M., Jr...131 N. Washington St.
Lavengood, Russell W.....225 Glass Block
Long, Max R.....803 S. Boots St.
Lonngren, Dudley H.....131 N. Washington St.
Love, V. Logan.....131 N. Washington St.
Miller, H. Allison.....320 Glass Block
Pattison, John D.....131 N. Washington St.
Pearcy, Marcene.....500 Wabash Ave.
Powell, J. Paxton.....500 Wabash Ave.
Price, Ambrose M.....219 E. 30th St.
Reid, James D.....505 Buckingham Dr.
Renbarger, Lester L.....1531 W. Second
Rhamy, Arthur P.....500 Wabash Ave.
Rhorer, John G.....500 Wabash Ave.
Richardson, Joseph H.....131 N. Washington St.
Roll, William A.....131 N. Washington St.
Schroeder, Robert W.....317 N. Western Ave.
Simmons, Frederick H.....1009 N. Baldwin
Skomp, Claud E.....500 Wabash Ave.
Smith, Barton T.....131 N. Washington St.
Snowhite, Arthur B.....500 Wabash Ave.
Thompson, B. Jay.....Marion General Hosp.
Walton, R. Lee.....131 N. Washington St.
Warren, Carroll B.....511 Glass Block
Weinberg, Samuel.....104 W. Third St.
Wilson, Ned A.....317 N. Western Ave.
Wojcik, Ladislas D.....131 N. Washington St.
Woodbury, John W.....131 N. Washington St.
Young, Robert G.....2927 S. Washington St.

Beck, Thomas A.....Swayzee
Taylor, Everett C.....Upland
Rifner, Eugene S.....Van Buren
McIlwain, Eleanor E....Methodist Home, Warren
McIlwain, Robert E.....Methodist Home, Warren

GREENE COUNTY

Bloomfield

Graf, Jerome A.....6 E. Main St.
Mount, Mathias S.....55 N. Franklin St.
Turner, Harold B. (S).....126 E. Indiana Ave.
Turner, Jack J.....126 E. Indiana Ave.
Van Sandt, Frank A. (S).....110½ E. Main St.

Jasonville

Porter, Carl M.....124 Cook St.
Rotman, Harry G.....111½ E. Main St.
Rotman, Sam I.....P. O. Box 127

Linton

Bailey, Edwin B.....129 E. Vincennes
Broshears, Kenneth P.....129 E. Vincennes
Raney, Ben B.....129 E. Vincennes
Tomak, Milton E.....289 N. Main St.
Woner, John W.....Linton

Hamilton, M. Luther (S).....Newberry
Moses, George E.....Worthington
Moses, Robert E.....Worthington

HAMILTON COUNTY

Karlick, Joseph R.....Arcadia
McDaniel, Franklin P. (S).....Atlanta
Donahue, Claude M.....Carmel
Thomas, W. Clayton.....Carmel
Havens, Oscar.....Cicero
Long, Malcolm D.
10447 N. College, Indianapolis (80)

Noblesville

Ambrose, Jesse C.....298 N. Ninth Street
Blackburn, Howard R.....Riverview Hospital
Campbell, Sam W.....88 S. 19th St.
Carter, Eunice M.....1084 Clinton St.
Carter, Robert E., Jr.....1084 Clinton St.
Harris, Robert F.....120 N. 9th St.
Hash, John S.....110 Lakeview
Haywood, John G.....120 N. 11th St.
Hooke, Samuel W. (S).....P. O. Box 224
Lanning, R. Adrian.....10th and North Dr.
Lloyd, Joe R.....148 N. 9th St.

Shanks, Ray W. 104 S. 10th St.
Southard, Carl B. 55 S. 16th St.

Griffith, James W. Sheridan
Manhart, Doyle B. Sheridan
Newby, Eugene Sheridan
Reck, John L. (S) Sheridan
Connoy, Andrew F. Westfield
Connoy, Leo F. Westfield

HANCOCK COUNTY

Scott, Robert O. Charlottesville
Garrison, James L. Cumberland
Navin, Hugh K. Fortville
Rhynearson, Hal R. Fortville

Greenfield

Beeson, Wilbur P. 1001 N. State St.
Endicott, Wayne H. 10 W. Boyd
Farrell, John J., Jr. 1001 N. State St.
Gibbs, Charles M. (S) 203 E. North St.
Henn, R. Anthony 137 Michigan St.
Hunter, Donn R. 10 W. Boyd
Kinneman, Robert E. 114 N. State St.
Kirby, Ted C. 114 N. State St.
Smith, John H. 744 N. State St.
Vingis, Bronie A. 746 N. State
Woods, James R., Jr 11 N. State St.

Cagle, Bob R. New Palestine
Pierson, Thomas A. New Palestine
Freeborn, Warren S. Jr. Oaklandon
Miller, Joseph A. Oaklandon
Kuhn, Robert W. Wilkinson

HARRISON-CRAWFORD COUNTIES

Corydon

Blessinger, Louis H. 101 W. Chestnut St.
Brockman, Wilfred J. 439 E. Chestnut
Dillman, Carl E. Beaver & Oak Sts.
Dukes, David J. 439 E. Chestnut St.
Jordan, Richard A. Harrison Dr.
Martin, Samuel W. R.R. 1

Baker, Guy D (S) Crandall
Gobbel, Novy E. (S) English
Seipel, Stanley Lanesville
Benz, Jesse C. (S) Marengo
Lynch, Otis R. Marengo
Mathys, Alfred ..234 E. Walnut St., Louisville, Ky.

HENDRICKS COUNTY

Brownsburg

Black, M. James 702 E. Main St.
Foltz, Lloyd E. 20 W. Main
Scudder, Arthur N. 24 N. Grant St.
Walker, Thomas 702 E. Main St.

Danville

Dalton, Naomi L. Hendricks Co. Hospital
Kirtley, Robert W. 138 W. Marion St.
Koch, Elmer L. 201 E. Columbia St.
Terry, Lloyd 138 W. Marion St.

Chase, Thomas P.
Avon, R. #8, Box 300C, Indianapolis
Ellis, Lyman H. Lizton
Gibbs, Joseph W. Home Lawn Sanitarium, Martinsville
Karpel, Bernard Mooresville
Wiseheart, Oscar H. (S) North Salem
Scamahorn, Malcolm O. Pittsboro
Scamahorn, Oscar T. (S) Pittsboro

Plainfield

Aiken, Milo M. 140 N. Center St.
Cohen, Irving 645 E. Main St.
Haggard, David B. P. O. Box 191
Stafford, William C. 107 W. Main St.
Warbinton, Fred P. P. O. Box 191

Frantz, Mount E.
3530th USAF Hosp., Bryan AFB, Texas

HENRY COUNTY

Clark, Marion E. Cambridge City
Donahue, Francis E. Dublin
Hollenberg, Alfred E. 25 W. N. Market, Hagerstown
Miller, William A. ..99 S. Washington, Hagerstown
Wiatt, Leonard H. Knightstown
Scheetz, Marion R. Lewisville
Stauffer, George E. Mooreland

New Castle

Amos, Robert L. 1219½ Race St.
Balcom, Francis H. 2003 Wuthering Dr.
Bledsoe, James G. 319 S. 14th St.
Brock, Joseph T. New Castle State Hosp.
Burnett, Arthur B. 106 N. Main St.
Cain, David R. New Castle State Hosp.
Craig, Alexander F. 415 Raintree Dr.
Das, Amal K. New Castle State Hosp.
Easter, James N. 1912 Bundy Ave.
Fisher, John E. 540 S. Main St.
Foster, Ray T. 420 N. Main St.
Grant, Phyllis A. 1912 Bundy Ave.
Harrison, Benjamin L. 540 S. Main St.
Heilman, William C. (S) 1319 Church St.
Heilman, William C., Jr. 1319 Church St.
Hill, Kenneth G. 1319 Church St.
Iterman, George E. (S) 1319 Church St.
Kennedy, Walter U. (S) 208 Union Block
Life, Homer L. 1015 Broad St.
McClelland, Harry N. 410 Burr Bldg.
McDonald, Frank C. 527 S. Main St.
McElroy, James S. 1319 Church St.
McKee, Roy G. 606 N. Fair Oaks Dr.
Murray, William E. New Castle State Hosp.
Saint, William K. 540 "B" South Main St.
Smith, Mark E. 1319 Church St.
Steussy, Calvin, N. Henry Co. Hospital
Stricker, Paul J. 319 S. 14th St.
Thorne, Charles E. 200 N. 12th St.
Tully, John A. (S) 502 S. Main St.
Vivian, Donald E. Henry County Hospital
Wilhelm, Guido P. 1319 Church St.

Robertson, William S. Spiceland

HOWARD COUNTY

Denton, Larkin D. Greentown
Shoup, Homer B. (S) Greentown

Kokomo

Althoff, William R. Chrysler Corporation
Alward, John H. 321 W. Walnut St.
Artis, Myrle E. 107½ S. Union St.
Ault, Carl H. 502 S. Berkley Rd.
Belding, Ray T. 3130 S. La Fountain St.
Blaisdell, Glenn D. Delco Radio Div.
Boughman, Joe D. 2008 W. Sycamore
Bowers, Copeland C. 210 W. Mulberry St.
Bowers, Garvey B. 210 W. Mulberry St.
Bowers, John A. 210 W. Mulberry St.
Bradley, Richard V. 3130 S. La Fountain St.
Brown, Earl R., Jr. 1907 W. Sycamore St.
Bruegge, Theodore J. 2108 W. Sycamore
Cattell, Lee M. 214 E. Mulberry St.
Clarke, Elton R. 1039 S. Main St.
Conley, Thomas M. 500 Southway Blvd. East

Craig, Reuben A. 514 W. Superior St.
Craig, Reuben 514 W. Superior St.
Crawford, Theodore R. 2114 W. Sycamore St.
Earl, Max M. 502 S. Berkley Rd.
Elleman, John H. 414 W. Mulberry St.
Ericson, Homer S. 905 West Mulberry
Ferry, Paul W. 406 Union Bank Bldg.
Fields, Donald L. 500 Southway Blvd. East
Frazier, John L. 500 Southway Blvd. East
Fretz, Richard C. 215 W. Superior St.
Golper, Marvin N. 1907 W. Sycamore St.
Good, Richard P. 400 S. Berkley Rd.
Grothouse, Carl B. 402 S. Berkley Rd.
Halfast, Richard W. 402 S. Berkley Rd.
Harshman, James A. St. Joseph Hospital
Hoyt, John M. 416 W. Sycamore St.
Hutto, William H. 215 W. Superior St.
Jewell, George M. 610 Armstrong-Landon Bldg.
Kremers, George A. 404 S. Berkley Rd.
Longshore, Robert E. 2016 W. Sycamore Rd.
McClure, Warren N. 319 S. Berkley Rd.
McIndoo, Ralph E. (S) 313 W. Taylor St.
Mendelson, Stanley M. 117 W. Markland
Michael, Robert L. 401 E. Reynolds Dr.
Morrison, William R. (S) 504 Union Bank Bldg.
Murray, Ernest C. 408 W. Mulberry St.
Paris, Durward W. 614 Armstrong-Landon Bldg.
Perkins, Powell L. 2112 W. Sycamore
Phares, Robert W. 905 W. Mulberry St.
Prather, Philip E. 909 S. Courtland
Radpour, Shokri 315 S. Berkley Rd.
Ramey, John W. (S) 107½ S. Union St.
Rhorer, Herbert M. (S) 417 W. Sycamore St.
Rudicel, Max 1907 W. Sycamore St.
Schwartz, Frederick C. 2016 W. Sycamore
Shenk, Earl M. (S) 208½ N. Main St.
Smith, Charles F. Howard Community Hosp.
Smith, Gloster J. 102½ S. Main St.
Sorenson, Raymond 404 S. Berkley Rd.
Spangler, Jesse S. 215 E. Taylor St.
Trimble, John G. 116 S. Buckeye St.
Wachob, Tom W., Jr.
406 Armstrong-Landon Bldg.
Wible, James H. 2112 W. Sycamore St.

Miller, Arthur H. (S) Russiaville
Ware, John R. Russiaville

HUNTINGTON COUNTY

Huntington

Brubaker, Harold S. 42 W. Park Dr.
Casey, Stanley M. 408 E. Market St.
Clark, Joseph H. 818 W. Park Dr.
Clunie, William A. 323 W. Park Dr.
Cope, Stanton E. 1022 N. Jefferson St.
Doermann, Paul E. 340 E. Market St.
Erehart, Mark G. (S) Maple Grove Rd., R. R. 8
Eviston, John B. 34 E. Washington St.
Gill, Donald R. 1412 Oak St.
Grayston, Wallace S. (S) 303 E. Market St.
James, Thomas, Jr. 202 U. B. Publishing Bldg.
Johnston, Robert G. (S) 339 E. Market St.
Marks, Howard H. 248 W. Park Dr.
Meiser, Robert D. 612 N. Jefferson St.
Mitman, Floyd B. 210 W. Park Dr.
Omstead, Trevalyn W. 229 Vine St.
Peare, Reeve B. 1568 N. Jefferson St.
Van Campen, Warren M. 354 E. Washington St.
Wagner, Richard 1355 Guilford

Cooper, B. Trent Roanoke
Bennett, J. B. Warren
Ray, Carl S. Warren
Miller, Wayne S.
1926 Park Forest Dr., Flint, Mich.

JACKSON-JENNINGS COUNTY

Gillespie, Garland R. Brownstown
Shields, Jack E. Brownstown
Guthrie, William H. Muscatatuck State School, Butlerville
Knotts, Slater R. R. 3, Columbus

Adair, William K. (S)
115 Armstrong, Crothersville
Bard, Frank B. 305 E. Howard St., Crothersville
Butler, Joe B. 508 E. Moore St., Crothersville

Scharbrough, William D. Ewing

North Vernon

Berkshire, Shaffer B. Long St.
Calli, Louis 408 S. State St.
Ellis, Forrest D. 241 Norris Ave.
Johnson, William A. 245 Norris Ave.
Thayer, Benet W. 20 S. Jackson St.

Seymour

Baxter, Harry R. 326 N. Walnut St.
Black, Joe M. 502 W. Second St.
Bobb, Kenneth E. 406 S. Chestnut St.
Bosch, Ralph 635 W. Second St.
Day, William D. C. 410 S. Chestnut St.
Graessle, Harold P. 304 W. Second St.
Martin, Guy 105 N. Walnut St.
Miller, Harold E. Vehslage Bldg.
Ripley, John W. 321 Bruce St.
Templeton, Ian S. 207 N. Pine St.
Wiethoff, Clifford A. 214 N. Walnut St.

JASPER-NEWTON COUNTIES

Schoonveld, Arthur Brook
Parker, John C. Goodland
Yegerlehner, Roscoe S. Kentland
Guzman, M. F. Morocco
Schantz, Richard Remington

Rensselaer

Beaver, Ernest R. 111 Thompson St.
Greene, Robert W. 212 S. Van Rensselaer St.
Jones, Edwin F. Jasper County Hosp.
O'Brien, Francis E. McKinley and Washington Sts.
Ockerman, Kenneth R. 119 W. Harrison St.
Williams, Paul A. 119 W. Harrison St.

Gwin, Merle D. (S)
2111 Regatta Ave., Miami Beach, Fla.

JAY COUNTY

Dunkirk

Entner, Charles L. 125 E. Commerce
Heller, Nelson L. R. (S) 354 E. Washington St.
Shroyer, Herbert 244½ S. Main St.
Tate, Elizabeth 317 S. Main St.

Andrews, C. Franklin R. R. 1, Geneva

Portland

Cripe, William H. 302 N. Meridian St.
Donnally, George A. Jay County Hospital
Fitzpatrick, James S. 603 W. Arch St.
Gillum, Eugene M. 522 W. Arch St.
Keeling, Forrest E. 504 W. Arch St.
Lyon, Florence M. 127 E. North St.
Morrison, George C. 116 W. Walnut St.
Schenck, Ralph E. 603 W. Arch St.
Spahr, Donald E. 615 W. Race St.
Steffy, Ralph M. 504 W. Arch St.
Vormohr, Joseph F. 604 W. Arch St.

JEFFERSON-SWITZERLAND COUNTIES

Madison

Alcorn, Merritt O. R. R. 2
Childs, Wallace E. 412 E. Main St.
Davis, Lloyd H. (S) Madison State Hospital
Fong, Theodore C. C. Madison State Hospital
Haney, William K. 445 Clifty Dr.
Hare, Francis W., Jr. 722 W. Main St.
Harris, George F. 445 Clifty Dr.
Jolly, Lewis E. 722 W. Main St.
Karnafel, Eugene T. 2300 Ross St.
May, George A. 426 E. Main St.
McAtee, Ott B. Madison State Hospital
Modisett, Jackson W. 722 W. Main St.
Modisett, Marcella S. 722 W. Main St.
Moore, Martha Madison State Hospital
Pratt, Ralph M., Jr. 323 Poplar St.
Prenatt, Francis Madison State Hospital
Riley, H. S. Madison Clinic
Rucker, Warren R. 426 E. Main St.
Shuck, William A. Odd Fellows Bldg.
Sloan, W. Keith 426 E. Main St.
Turner, Anna Goss 602 E. Second St.
Turner, Oscar A. (S) 602 E. Second St.
Zink, Robert O. 722 W. Main St.

Graves, Noel S. Vevay
Hamilton, Antha A. Vevay

JOHNSON COUNTY

Lutes, David L. (S) 305 S. Kyle St., Edinburg

Franklin

Andrews, Hugh K. 176 E. Jefferson St.
Bullers, Robert C. 395 S. Home Ave.
Chappel, Alfred T. 100 N. Main St.
Deppe, Charles F. 301 E. Jefferson St.
Ferrara, Joseph F. 1107 N. Main St.
Foster, Robert H. K. 301 E. Jefferson St.
Hibbs, William G. Masonic Hospital
Jones, Charles A. 251 E. Jefferson St.
Mock, Harry E., Jr. 901 N. Main St.
Portteus, Walter L. 1551 N. Main St.
Province, Oran A. 100 N. Main St.
Province, William D. 100 N. Main St.
Records, Arthur W. 198 E. Jefferson St.
Records, John M. 198½ E. Jefferson St.
Ritteman, George W. .. Johnson Co. Memorial Hosp.
Stogsdill, Willis W. 176 E. Jefferson St.
Walters, Jack L. 1551 N. Main St.
Waymire, William M. 1551 N. Main St.
Wesemann, Merrill M. 17 Morning Dr.

Greenwood

Barnes, Helen Beall 360 S. Madison Ave.
Brown, George E. 374 S. Madison Ave.
Chambers, Pauline D. 360 S. Madison Ave.
Link, Charles W. Jr. 360 S. Madison Ave.
Ogle, Robert W. 365 W. Main St.
Onyett, Harold R. R. R. 3, Box 32
Sheek, Kenneth I. 188 S. Madison Ave.
Snodgrass, Robert E. 365 S. Madison Ave.
Tiley, George A. 41 N. Madison Ave.
Young, Joseph 360 S. Madison Ave.

Bullington, George E. Whiteland
Machledt, John H. Whiteland

KNOX COUNTY

Bicknell

Byrne, Robert J. 207 N. Main St.
Shanklin, Jack L. 417 N. Main St.
Wilson, Guy H. 120 W. Third St.

Springstun, George H. Oaktown

Vincennes

Anderson, John B. 301 LaPlante Bldg.
Anderson, Richard M. 301 LaPlante Bldg.
Arbogast, Paul B. 915 Main St.
Barrett, Thomas L. 307 S. Fifth St.
Bartlett, Donald T. 307 S. Fifth St.
Beckes, Ellsworth W. 220 N. Fifth St.
Black, Boyd K. Good Samaritan Hospital
Chattin, Herbert O. 729 Main St.
Coffel, Melvin H. 424 LaPlante Bldg.
Corsentino, Bart E. Good Samaritan Hospital
Curtner, Myron L. (S) 222 N. Sixth St.
Edwards, Edward T. 34 S. Seventh St.
Ewing, Nathaniel D. 719 Nicholas
Hendrix, Charles E. 603 Busseron
Hoffman, Doris 720 Perry St.
Humphreys, Joe E. 1516 N. Second St.
Jones, John G. (S) 210 N. Third St.
Kline, Charles D. 301 American Bank Bldg.
McCormick, Hubert D. (S) 325 LaPlante Bldg.
McDowell, Mordecai M. 611 Dubois St.
McMahan, Virgil C. 609 Dubois St.
Moore, Robert G. 21 N. Third St.
Nichols, Robert J. 605 Busseron St.
Parmenter, Harry B. 301 American Bank Bldg.
Reilly, James F. 401 Buntin St.
Saul, F., William Good Samaritan Hospital
Schulze, William 810 Buntin St.
Shaffer, Kenneth L. 404 LaPlante Bldg.
Smith, Ralph O. 603 Busseron
Smith, S. Joseph 301 LaPlante Bldg.
Spencer, Frederic 429 S. Sixth St.
Stein, Richard H. 301 American Bank Bldg.
Stewart, J. Frank W. Hillcrest Hospital
Tolbert, Robert D. 607 Dubois St.
Vaughn, Walter R. 615 Dubois St.
von der Lieth, William C. 719 Nicholas
Welch, Norbert M. 615 Dubois St.

KOSCIUSKO COUNTY

Poehler, Frederick C. Claypool
Urschel, Dan L. Mentone
Wilson, Wymond B. Mentone
Pierson, Pearl H. Silver Lake

Warsaw

Arford, John E. 102 E. Fort Wayne
Baum, John R. 212 S. Indiana
Cron, William J. 215 S. High St.
Dormire, Robert D. 600 E. Winona Ave.
DuBois, Charles C. (S) 800 E. Center St.
Hashemi, Hossein 215 S. High St.
Haymond, George Ted Williams Dr., R. R. 2
Hillery, John L. 208 E. Center St.
Hogle, Frank D. R. F. D. 2
Reed, Edgar A. 422 S. Buffalo St.
Schlemmer, George H. Murphy Medical Center
Shrader, Carl E. 600 E. Winona Ave.
Thomas, Everett W. 212 S. Indiana

LAGRANGE COUNTY

Taylor, M. Reed Howe
Wade, Alfred A. (S) Howe
Yunker, Philip E. Howe

LaGrange

Benedict, Charles D. 203 W. Wayne St.
Flannigan, Harley F. 213 W. Lafayette
Miller, Jerry A. Medical Bldg.
Studebaker, Lloyd R. Medical Bldg.

Williams, John H. Shipshewana
Lehman, Kenneth M. Topeka
Weir, Dale .. 3030 Beals Branch Rd., Louisville, Ky.

LAKE COUNTY

Cedar Lake

Babcoke, Gary A. R. R. 2, Box 337
King, Robert W. R. R. 1, Box 4
Miller, Donald C. R. R. 2, Box 337
Misch, William R. R. 2, Box 337

Crown Point

Becker, Philip H. ... Lake County Tuberculosis San.
Birdzell, John P. 124 N. Main St.
Carroll, Mary D. 124 N. Main St.
Doherty, Raymond J. 47 W. 68th Place
DuSold, Donald D. 306 E. Joliet
Gray, Daniel E. 182 W. North St.
Gutierrez, Peter E. 123 N. Court St.
Horst, William N. 123 N. Court St.
Monroe, F. Bruce 40 West 73rd St.
Russo, Andrew E. 224 S. Court St.
Steele, Everett B. 109 E. North St.
Troutwine, William R. 224 S. Court

Adler, Edmund R. 215 Joliet, Dyer
Theobald, Sterling 212 Joliet St., Dyer

East Chicago

Barron, Elmer A. 3406 Guthrie St.
Benchik, Frank A. 4712 Magoun Ave.
Bonaventura, Angelo P. 3701 Main St.
Boyd, Charles S. 4739 Melville Ave.
Boys, Fay F. 4712 Magoun Ave.
Brauer, Abraham A. 3528 Main St.
Braun, Benjamin D. St. Catherine's Hospital
Broomes, Edward L. C. 2402 Broadway
Bryant, Edward G. 2220 Broadway
Campagna, Ettro A. 3406 Guthrie St.
Dainko, Alfred J. 823 W. Chicago Ave.
Fedor, Thomas A. 3406 Guthrie St.
Fleischer, Jacob C. 4035 Elm St.
Frahm, Charles 4321 Fir
Gardiner, H. Glenn 3210 Watling
Geronimo, Manuel M. 3528 Main St.
Geronimo, Rita R. V. 3528 Main St.
Govorchin, Alexander 4614 Baring
Grosso, William G. 1919 E. Columbus Dr.
Harper, James W. 3847 Euclid
Hayes, Jesse D. 4804 Alexander
Hernandez, I. C. 1802 Columbus Dr.
Irish, Wilbur J. 806 W. Chicago Ave.
Johns, David R. (S) 1211 Beacon St.
Komoroske, John E. 4710 Indianapolis Blvd.
Kopanko, Bernard F. 823 W. Chicago Ave.
Levin, Eli L. (S) 4105 Grand Blvd.
McGuire, Desmond F. (S) 3429 Michigan Ave.
Marks, Ora L. 815 W. Chicago Ave.
Marquinez, Adoracin A. 4124 Elm
Milan, Shisachki D. 622 W. Chicago Ave.
Nicosia, John B. 1802 E. Columbus Dr.
Payne, Arthur C. 2020 Broadway
Perdomo, Octavio J. 3406 Guthrie St.
Ramos, John 3807 Main St.
Reitman, Paul H. 4321 Fir St.
Romero, Plinio 3526 Main St.
Serna, Carlos A. 4035 Elm St.
Serna, Jesus A. 3619 Main St.
Shapiro, Joseph 3738 Main St.
Shulruff, Harry I. 3701 Main St.
Teegarden, Joseph A., Jr. 1919 E. Columbus Dr.
Teegarden, Joseph A. (S) 1919 E. Columbus Dr.
Teplinsky, Louis L. 1802 E. Columbus Dr.
Trepagnier, Francis B. 3628 Main St.
Walker, Adolph P. 1820 E. Columbus Dr.
Wang, Tieh C. 4321 Fir St.
Zallen, Stanley G. 720 W. Chicago Ave.

Gary

Abramson, Allan L. 3290 Grant St.
Agana, Adriano A. 6121 Birch
Alfano, Paul A. 2717 Wabash
Almquist, Carl O. 504 Broadway
Alvarez, Paul 2717 Wabash Ave.
Ambrozaitis, Kazys 1600 W. Sixth Ave.
Amico, Pasquale J. 3807 Washington
Armalavage, Leon J. 2620 W. Fifth Ave.
Barton, Reginald R. 427 S. Lake
Behn, Walter M. 1514 W. Fifth Ave.
Bendler, Carl H. 3290 Grant St.
Bergal, Milton B. 738 Broadway
Bernard, Marvin R. 3807 Washington St.
Bernoske, Daniel G. 2306 W. 65th St.
Bills, R. James 504 Broadway
Bills, Robert N. 504 Broadway
Bisgyer, Jay L. 4801 W. Fifth Ave.
Borak, Walter J. 5000 Ridge Road
Bornstein, Herschel 3290 Grant
Brady, Samuel G. 757 Broadway
Brandman, Harry 504 Broadway
Brincko, John 504 Broadway
Bringas, Irineo B. 858 Broadway
Brink, Calvin C. (S) 504 Broadway
Brown, David B. 504 Broadway
Brown, Leo R. 4645 Broadway
Bullard, Mattie J. 2432 W. Fifth Ave.
Burcham, James B. 738 Broadway
Cahué, Antonio R. 504 Broadway
Carberry, George A. 3656 Grant St.
Carbone, Joseph A. 504 Broadway
Carey, J. Albert 1903 Broadway
Carmody, Raymond F. 504 Broadway
Choslovsky, Sydney Methodist Hospital
Chube, David D. 1606 Broadway
Cohen, Hyman 3290 Grant St.
Cooper, Leo K. 504 Broadway
Corrao, Gaetano 2471 Colfax
Cuello, Jose E. 827 W. 11th Ave.
Daniel, Robert A. 738 Broadway
Darling, Dorothy R. 807 Fayette
Dasaro, George E. 757 Broadway
Davis, Neal 1600 W. Sixth Ave.
De Bois, Elon 1080 Roosevelt
Dian, August J. 504 Broadway
Dierolf, Edward J. 504 Broadway
Donchess, Joseph C. 215 Broadway
Dosado, Elpidio B. 625 Washington
Duncan, John S. 2165 W. 11th Ave.
Elliott, Ralph A. 1726 W. Sixth Ave.
English, Hubert M. 673 Broadway
Espy, Theodore R. 1901 Broadway
Fadell, Matthew J. 4655 Broadway
Fadul, Armand 5317 W. Fifth Ave.
Franklin, Philip L. 936 W. Fifth Ave.
Galante, Vincent J. St. Mary Mercy Hospital
Gallinatti, John J. 554 S. Lake
Gilles, Pierre 1649 Broadway
Glover, William J. 504 Broadway
Goldberg, Harold B. 3656 Grant
Golding, Robert F. P. O. Box 727
Goldstone, Adolph 3229 Broadway
Goldstone, Arthur 3578 Buchanan
Goldstone, Joseph 3229 Broadway
Goldstone, Robert J. 339 West 35th St.
Goldstone, Sidney R. 3233 Broadway
Goodwin, Thomas 3820 Central, East Gary
Grant, Benjamin F. 1706 Broadway
Gregoline, Amadeo F. 729 Broadway
Gregoline, Eugene 330 Taney
Hadey, James H. 2620 W. Fifth Ave.
Han, Daniel 1600 W. Sixth Ave.
Hedrick, James T. 1649 Washington St.
Hodurski, Zigfield 4319 Broadway
Hoit, Leonard 504 Broadway
Holliday, Alfonso 1649 Broadway
Jahns, Albin A. 2318 W. Fifth St.
Johnson, Arnold L. 1903 Broadway
Johnson, Lonnie B. 123 W. 21st St.
Johnson, William H. 3656 Grant
Kaltenthaler, Albert 1600 W. Sixth Ave.
Kamen, Jack M. 1600 W. Sixth Ave.
Kendrick, Frank J. 504 Broadway

Khaton, Odessa M. 1649 Broadway
Kobrin, Meyer W. 3229 Broadway
Kolettis, John G. 504 Broadway
Kopcha, Joseph E. 504 Broadway
Korn, Jerome M. 3290 Grant St.
Lazo, Vicente R. 765 Broadway
Lebioda, Henry S. 4655 Broadway
Lewis, George N. 504 Broadway
Lewis, Lucien A. 1649 Broadway
Lewis, W. Richard 1505 Taft
Lipschutz, Harold 504 Broadway
Lipsey, Alfred J. 504 Broadway
Loh, Hwei Ya (Chang) 212 Cleveland St.
Loh, Wei-Ping 212 Cleveland St.
Lorenty, Thaddeus B. 504 Broadway
Lovell, Martin H. 1606 Broadway
Lutz, Georgianna 504 Broadway
Lytwakiwsky, Anatol 552 S. Lake
McMath, Samuel B. 1649 Broadway
Majsterek, Stanley L. 1034 Aetna St.
Manalo, Francisco S. 538 Lincoln
Marcus, Morris C. 3229 Broadway
Marshall, Millard R. 504 Broadway
Mather, J. Winford 2250 Ripley St., East Gary
May, Richard M. 583 Broadway
Milos, Robert J. 504 Broadway
Minczewski, Richard C. 5490 Broadway Plaza
Mitchell, Georgia B. 1706 Broadway
Molengraft, Cornelius J. 504 Broadway
Morris, Hyman R. 3229 S. Broadway
Moswin, Jack A. 504 Broadway
Mott, William H. 2009 Broadway
Nelson, Walfred A. 559 S. Lake St.
Oberlander, Seymour 3290 Grant St.
Olivo, Marciano T. 1600 W. Sixth Ave.
Olson, Leslie D. 2318 W. Fifth Ave.
Ornelas, Joseph P. 3656 Grant St.
Pappas, Eddie T. 2717 Wabash Ave.
Parratt, Louis W. 708 Broadway
Penn, Robert A. 3792 Central Ave., East Gary
Poracky, Bernard F. 504 Broadway
Pruitt, J. Edward 4655 Broadway
Radigan, Leo R. 2318 W. Fifth Ave.
Ramos, Alfonso 5490 Broadway
Reynolds, James S. 504 Broadway
Richter, Samuel 504 Broadway
Riordan, John F. Methodist Hospital
Robinson, Walter K. 504 Broadway
Rosenbloom, Philip J. 571 Lincoln St.
Ross, David E., Jr. 633 E. 21st St.
Roth, Leo 3229 Broadway
Roth, Melvin I. 3229 Broadway
Rubin, Simon S. 504 Broadway
Ryan, Hubert J. 5490 Broadway Plaza
Sala, Joseph J. 2705 Wabash
Sala, Walter R. 2705 Wabash
Schulz, Kurt J. 4655 Broadway
Schwarz, Mandel 540 Tyler
Scully, John T. 2318 W. Fifth Ave.
Senese, Thomas J. 504 Broadway
Shellhouse, Michael 3811 Washington St.
Shevick, Alexander 2620 W. Fifth Ave.
Slama, George F. 4431 Broadway
Slama, John T. 4481 Broadway
Spellman, Frank W. 401 S. Lake
Spivack, Mary 504 Broadway
Stern, Mona K. 7535 E. Harold
Stimson, Harry R. 504 Broadway
Stookey, Richard D. 4655 Broadway
Stoycoff, Christ M. (S) 860 Broadway
Thomas, Daniel D. 3290 Grant St.
Thomas, Gerald J. 3920 Grant St.
Turgi, Robert W. 504 Broadway
Valencia, M. Monica 2606 Central Ave., East Gary
Verplank, Grover L. (S) 2701 W. 57th Ave.
Voorhies, McKinley 1606 Broadway
Walters, Eleanor 602 Broadway
Washington, G. Kenneth 1645 Broadway
Weiskopf, Henry S. 504 Broadway
Wharton, Russell O. (S) 6559 Ash Place
Whitaker, Jack 540 Tyler
Williams, Alexander S. 436 W. 25th St.
Williams, Edwin D. 436 W. 25th St.
Williams, Fred R. 2501 Polk St.
Wimmer, Robert N. (S) 9 W. Sixth St.
Yast, Charles J. 504 Broadway
Yocum, Paul S. Sr. 757 Broadway
Yocum, Paul S. Jr. 504 Broadway
Yocum, William S. 790 Broadway
Young, George M. 3656 Grant St.
Young, Robert L. 504 Broadway
Zucker, Edward 504 Broadway

Griffith

Carpenter, Bennie F. 1212 N. Broad
Lundeberg, Ralph A. 1212 N. Broad St.
Moleski, Walter L. 401 N. Broad St.
Purcell, Richard J. 433 N. Glenwood
Siekierski, Joseph M. 145 N. Griffith

Hammond

Alfano, Joseph E. 5252 Hohman Ave.
Allegretti, Michael L. 6850 Hohman Ave.
Bacevich, Andrew J. 2450—169th St.
Balaguer, Carmen V. St. Margaret Hospital
Beconovich, Robert 6850 Hohman Ave.
Bethea, Dennis A. (S) 1021 Fields St.
Bombar, Leslie E. 6850 Hohman Ave.
Church, Robert A. 837—169th St.
Claybourn, Norman L. 1617—169th St.
Costello, Albert J. 30 Douglas St.
Cotter, Edward R. 2415 169th St.
Davis, Thomas N. III 5246 Hohman Ave.
Eggers, Ernest L. (S) 635 165th St.
Eggers, Henry W. 30 Douglas St.
Egnatz, Nicholas 820 Highland
Elledge, Ray 6415 Forest Ave.
Fischer, Burnell St. Margaret Hosp.
Fitzpatrick, William J. 30 Douglas St.
Friedman, Isadore E. 7217 Indianapolis Blvd.
Gevirtz, Milton B. 6850 Hohman Ave.
Howard, William Harry 5231 Hohman Ave.
Husted, Robert G. 6850 Hohman Ave.
Jones, Eli S. 30 Douglas St.
Kenney, Francis D. 30 Douglas St.
Kmak, Chester J. 6737 Magoun Ave.
Kolanko, Leon A. 30 Douglas St.
Koransky, David S. 7217 Indianapolis Blvd.
Kuhn, Arthur J. 112 Rimbach St.
Kuhn, Hedwig S. 112 Rimbach St.
LaFollette, Forrest R. 2450-169th St.
Lautz, Herbert A. 112 Rimbach St.
Long, Keith J. 30 Douglas St.
McVey, Clarence A. (S) 5231 Hohman Ave.
Mansueto, Mario D. 5231 Hohman Ave.
Marcus, Emanuel 7127 Indianapolis Blvd.
Marks, Salvo P. 30 Douglas St.
Maroc, James A. 837—169th St.
Marshall, W. J. Jr. 30 Douglas St.
Mason, Richard L. 132 Rimbach St.
Mintz, Alfred M. 7550 Hohman Ave.
Modjeski, Joseph R. 5451½ Hohman Ave.
Montes, Herminio Y. 5217 Hohman Ave.
Neal, Leonard W. 6850 Hohman Ave.
Nodinger, Louis 540 165th St.
Palmer, Barron M. F. 6134 Columbia
Panares, Solomon V. 5434 Hohman Ave.
Peck, Edward A. 430 Conkey St.
Peiffer, Geraldine M. St. Margaret Hospital
Pilot, Jean 5231 Hohman Ave.
Premuda, Franklin F. 6625 Kennedy Ave.

Ramker, Daniel T. 7040 Kennedy Ave.
Rasch, George C., Jr. 8148 Calumet
Rawlins, Carolyn M. 6223 Hohman Ave.
Remich, Antone C. 30 Douglas St.
Rendel, Donald T. 5231 Hohman Ave.
Repay, Walter A. 429 Conkey St.
Rhind, Alexander W. 422 Conkey St.
Rosenthal, Carl St. Margaret Hospital
Rosevear, Henry J. 30 Douglas St.
Row, Perrie Q. 7330 Indianapolis Blvd.
Rubright, Robert L. 7258 Forest Ave.
Sargent, Wallace B. 112 Rimbach
Schlesinger, Daniel J. 6850 Hohman Ave.
Schwartz, Mary M. St. Margaret Hospital
Smith, Jerald E. 6850 Hohman Ave.
Solis, Roger V. 422 Conkey St.
Sroka, Alexander G. 5305 Hohman Ave.
Stasick, Murray 7330 Indianapolis Blvd.
Stern, Samuel L. 5231 Hohman Ave.
Tilka, Edward C. 7134 Calumet
Trachtenberg, Lee 112 Rimbach
Weissman, Charles G. 5246 Hohman Ave.
White, Gilbert H. Jr. 2450—169th St.
Wong, Samuel N. 7127 Indianapolis Blvd.

Highland

Angel, Virgil E. 2933 Jewett
Bakos, Edward R. 8125 Kennedy
Eugenides, Tatiana 8136 Kennedy
Sroka, Stanley J. 2942 Highway Ave.
Vore, Hugh A. 8680 Prairie Ave.
Kyle, Michael A. I. U. Medical Center, Indianapolis 7

Hobart

Carter, John O. 295 S. Wisconsin St.
Doneff, Ronald H. R. 1, U. S. 6
Faulkner, Donald J. 295 S. Wisconsin St.
Kellar, Philip E. 701 N. Ridge
Krsek, Archie J. 10 N. Michigan Ave.
Markle, Joseph G. 201 Main St.
Parker, Harry C. (S) 831 Garfield St.
Pike, Warren H. 108 E. Third St.
Reed, John 10 N. Michigan Ave.
Thomas, Andrew C. 295 S. Wisconsin St.
Weiss, John T. 295 S. Wisconsin St.

Lowell

Smith, Robert D. 308 E. Commercial
Templin, David B. 308 E. Commercial

Munster

Alt, Edward M. Jr. 7550 Hohman Ave.
Arbeiter, Herbert L. 7550 Hohman Ave.
Arrowsmith, James L. 7550 Hohman Ave.
Brenner, Howard B. 7905 Calumet Ave.
Chael, Thomas C. 7905 Calumet Ave.
Egnatz, Charles D. 223 Terrace Dr.
Espino, Jose C. 8144 Calumet Ave.
Fetrow, Kenneth O. 7905 Calumet Ave.
Fox, Jack M. 7550 Hohman Ave.
Hammond, Stanley 7905 Calumet Ave.
Keplinger, James E. 7550 Hohman Ave.
Kott, Alexander 7550 Hohman Ave.
Lanman, John U. 8146 Calumet Ave.
Larrabee, James F. 130 Ridge Road
Madlang, Rodolfo M. 7550 Hohman Ave.
Mason, John C. 7905 Calumet Ave.
McLean, James S. 1836 Ridge Road
Navarre, Vincent J. 7628 Manor Ave.
Paul, Eudell G. 7550 Hohman Ave.
Portney, Fred R. 7905 Calumet Ave.
Rudolph, Franklin G. 7550 Hohman Ave.
Santare, Vincent J. 7550 Hohman Ave.
Schmitt, Robert J. 7905 Calumet Ave.
Schwartz, Jack 7550 Hohman Ave.
Snyder, Jerome A. 7905 Calumet Ave.
Stevens, Edwin W. 7905 Calumet Ave.
Sweany, Stanford K. 7550 Hohman Ave.
Westhaysen, Peter V. 7550 Hohman Ave.
Whereatt, Richard 7905 Calumet Ave.
Wooden, Thomas F. 8351 Crestwood Ave.

Portage

Hoham, Fred D. 14000 Central

Martirez, N. A. Rts. 41 and 30, Schererville
Skeen, Earl D. (S) 419 N. Sunnyside, South Bend

Whiting

Becker, Samuel W. 2075 Indianapolis Blvd.
Best, Robert C. 2075 Indianapolis Blvd.
Brennan, William C. 2075 Indianapolis Blvd.
Burtan, Rupert C. 2813 Indianapolis Blvd.
Feinberg, Irwin I. 2075 Indianapolis Blvd.
Ferry, John L. 2075 Indianapolis Blvd.
Frankowski, Clementine E. 1907 New York Ave.
Greisen, Jack G. 2075 Indianapolis Blvd.
Gustaitis, John W. 2075 Indianapolis Blvd.
Kudele, Louis T. 1321 119th St.
Polite, Nicholas L. 2075 Indianapolis Blvd.
Reed, Ronald R. 2075 Indianapolis Blvd.
Rudser, Donald H. 2075 Indianapolis Blvd.
Shapiro, Seymour W. 2075 Indianapolis Blvd.
Silvian, Harry A. 1010 119th St.
Smith, Theodore J. 1902 Indianapolis Blvd.
Sokol, Allen B. 2075 Indianapolis Blvd.
Stecy, Peter 1902 Indianapolis Blvd.
Steen, Lowell H. 2075 Indianapolis Blvd.
Troy, Jack M. 2075 Indianapolis Blvd.
Weinberg, Benjamin A. 1346 119th St.

Angeles, Uldarico A. 451 Clarkson Ave., Brooklyn, N. Y.
Bradley, Charles F. 406 Lincoln Ave., New Smyrna Beach, Fla.
Carlson, Milton R. 113 Dogwood, Oceanside, Calif.
Dimitroff, Lambro
211 Gold Coast Lane, Calumet City, Ill.
Feldner, Ronald P.
704 Wentworth, Calumet City, Ill.
Hayes, Frank W. Letterman Gen. Hosp., Presidio of San Francisco, Calif.
Hayes, Jesse D., Jr.
4143 A San Francisco, St. Louis, Mo.
Hoskins, Phillip A.
6038 U. S. A. F. Hosp., A. P. O. 919, San Francisco, Calif.
McMichael, Frank J. (S) Box 277, Hernando, Fla.
Murphy, Joseph F. 3508 Ridge Rd., Lansing, Ill.
Seyler, Anna G.
2780 Hillcrest Dr., La Verne, Calif.
Tsatsos, George C.
2 Holcomb St., Hartford 12, Conn.
Tyrrell, Joseph J.
800 State Line, Calumet City, Ill.
Tyrrell, Thomas C.
800 State Line, Calumet City, Ill.
Yanson, Mannfredo R. S.
P. O. Box 2024, Oxnard, Calif.

LA PORTE COUNTY

Oak, David, Jr. Hanna
Oak, David D. (S) LaCrosse

La Porte

Backer, George P. 806 Maple Ave.
Backer, Mary B. 903 Indiana Ave.
Carpentier, James R. 1200 Michigan Ave.
Carter, Fred S. 1200 Michigan Ave.
Cartwright, Jack D. 1003 Indiana Ave.
Datzman, Basil J. 216 E Street
Durham, Lowell J. 316 Pine Lake Ave.

Elshout, Clem H. 1004 Indiana Ave.
Erwin, W. Robert 216 E St.
Fargher, Robert A. 811 Jefferson Ave.
Farnsworth, Samuel A. 1012 Michigan Ave.
Feinn, Harry S. 1013 Indiana Ave.
Fischer, Carlton N. 1001 Maple Ave.
Kelsey, Robert M., Jr. 1200 Michigan Ave.
Kelsey, Robert M., Sr. 702 Maple Ave.
Kepler, Robert W. 708 Harrison St.
Kistler, James J. 911 Maple Ave.
Larson, Goyt O. 1110 Indiana Ave.
Mead, Frank E. 901 Indiana Ave.
Mueller, Edwin C. 1200 Michigan Ave.
Muhleman, Charles E. 1200 Michigan Ave.
Philbrook, Seth S. 705 Harrison St.
Predd, Adolph C. 909 Madison St.
Richter, John C. 1200 Michigan Ave.
Scott, John S. 806 Maple Ave.
Sirugo, Aldo C. 1200 Michigan Ave.
Tabaka, Francis B. 1201 Michigan Ave.
Von Asch, George 912 Monroe St.

Michigan City

Armstrong, Thomas D. 120 W. Ninth St.
Arney, Amos 125 E. Fifth St.
Baker, Warren 427 Warren Bldg.
Balingit, Benjamin L. P. O. Box 41
Bankoff, Milton L. 125 E. Fifth St.
Bergan, Joseph A. 217 W. Homer St.
Berkson, Myron E. 801 Washington St.
Burris, Floyd L. 731 Spring St.
Carlson, Norman R. 913 Wabash St.
Cleveland, John B. 2222 E. Michigan St.
Fargher, Francis M. 907 Washington St.
Frost, Robert J. 817 Pine St.
Gardner, Melvin D. 801 Washington St.
Gardner, Russell A. 801 Washington St.
Gilmore, Robert W. 304 Warren Bldg.
Gilmore, Russell A. (S) 304 Warren Bldg.
Given, Everett H. 907 Washington St.
Hay, Gene R. 106 Belmont Court
Henderson, Norman C. 131 E. Eighth St.
Hillenbrand, Charles 128 W. 10th St.
Jones, King S. 328½ Franklin St.
Kemp, John T. 122 E. Seventh St.
Kerr, Charlotte H. 723 Franklin St.
Kerr, John E. 723 Franklin St.
Kerrigan, John F. 916 Washington St.
Kerrigan, Robert L. (S) 916 Washington St.
Kubik, Francis J. 902 Pine St.
Liddell, Charles K. 508 Pine St.
Mannion, Rodney A. 723 Franklin St.
Marske, Robert L. 311-13 Warren Bldg.
McGue, Frank J. P. O. Box 41
Mladick, Edward A. 1412 Franklin St.
Miller, Maurice 125 E. Fifth St.
Milne, Walter S. 916 Washington St.
O'Brien, Raymond J. 1412 Franklin St.
Olson, William H. 509 Willard Ave.
Paul, Leonard G. 515 Pine St.
Phillips, Johns H. 801 E. 11th St.
Pilecki, Peter J. 125 E. Fifth St.
Plank, C. Robert 732 E. Pine St.
Quitasol, Zoilo A. Jr. 125 East Fifth St.
Reed, Nelle C. (S) 3210 Tilden Ave.
Schlossberg, Victor E. Warren Bldg.
Sciarrone, Francesco 817 Pine St.
Taub, Robert G. 125 E. Fifth St.
Tunnell, Harry D. 219 E. Sixth St.
Walters, William H. Warren Bldg.
Warren, Lewis T. 2936 Belle Plaine
Weeks, Patrick H. (S) 119 E. Sixth St.
Weiss, Albert E. 125 E. Fifth St.
Zalac, Donald A. 732 Pine St.

Weinstock, Adolph Rolling Prairie
Moosey, Louis Union Mills
Carter, William D. ..506 Roosevelt Rd., Walkerton
Rohrer, Bryce B. 506 Roosevelt Rd., Walkerton
Benz, Owen F. Wanatah

Westville

Constan, Evan Beatty Memorial Hospital
Dieter, William J. Beatty Memorial Hospital
Hetman, Mitchell J. Westville
Johnston, Donald D. (S)
Beatty Memorial Hospital
Matthew, John R. Beatty Memorial Hospital
Meyer, Hans Beatty Memorial Hospital
Morton, David P. Beatty Memorial Hospital
Oster, Jack H. Beatty Memorial Hospital
Salzburg, Herbert E. Beatty Memorial Hospital
Sennett, Cecil M. (S) Beatty Memorial Hospital
Smith, William M. Beatty Memorial Hospital
Wygant, Marion D. Beatty Memorial Hospital

LAWRENCE COUNTY

Bedford

Allen, L. Howard 1622 24th St.
Austin, Richard P. 209 Citizens Nat'l Bank Bldg.
Benham, Lawrence E. ..310 Stone City Bank Bldg.
Bridwell, Edgar 1626 24th St.
Campbell, William T. 2900 W. 16th St.
Duncan, Raymond 2900 W. 16th St.
Dusard, Joseph C. ..304 Citizens Nat'l Bank Bldg.
Edmonds, Kendrick 1303 15th St.
Emery, Charles B. 1027 15th St.
Fountaine, Thomas J. 1618 24th St.
Hammel, Howard T. 1501 J St.
Hawkins, Richard D. 2900 W. 16th St.
Kasting, Gerald 206 Citizens Nat'l Bank Bldg.
Kerr, Donald M. 2900 W. 16th St.
Morrow, Robert J. 1317 L St.
Newland, Arthur E. Masonic Temple
Noe, William R. 2900 W. 16th St.
Scherschel, John P. 1711 H St.
Waldo, Guy H. 2900 W. 16th St.
Wohlfeld, Julius B. 1222 15th St.
Woolery, Richard H. 1310 W. 16th St.

Hamilton, James R. ...111 S. Seventh St., Mitchell
Oswalt, James T. Mitchell
Robinson, William H. 124 N. Sixth St., Mitchell

MADISON COUNTY

Alexandria

Gaunt, Everett W. 214 E. John
Leroy, Alvin G. 1309 N. Harrison St.
Overpeck, George H. 313 N. Harrison St.
Owen, Thomas F. 313 N. Harrison St.
Shafer, Richard H. 111 S. Harrison St.

Anderson

Aagesen, Walter J. 702 Citizens Bank Bldg.
Armington, Charles L. ..655 Anderson Bank Bldg.
Austin, Charles E. 1612 Westwood Ave.
Baughn, William L. Guide Lamp
Beeler, Franklin K. 1931 Brown St.
Bixler, Donald P. 1931 Brown St.
Blassaras, Crist 2005 Broadway
Bowers, Charles R. 207 Anderson Loan Bldg.
Brauchla, Carl H. (S) 117 W. 17th St.
Bridges, Alvin 1302 Madison Ave.
Brock, Earl E. (S) 412 Anderson Bank Bldg.
Brown, James M. 12 W. 29th St.
Buckles, David L. St. John's Hospital
Bush, Edward R. 704 E. 8th St.
Castetter, Gregory K. 126 W. 12th St.
Dixon, Rex W. 934 W. 8th St.
Doenges, James L. 1931 Brown St.
Donaldson, Frank C. 1931 Brown St.
Drake, James R. 229 Citizens Bank Bldg.
Drake, John C. 604 Anderson Bank Bldg.
Drennen, Robert V. 1424 E. 8th St.

Dulin, Basil B. St. John's Hospital
Ellis, Seth W. 717 Anderson Bank Bldg.
Elsten, Aubrey W. 512 Anderson Bank Bldg.
Faust, Howard M., Jr. 315 Anderson Bank Bldg.
Ferguson, Donald H. 402 Anderson Bank Bldg.
Fischer, Warren E. St. John's Hospital
Gante, Henry W. (S) 2005 Nichol Ave.
Hensler, Benton M. 1709 Nichol Ave.
Irwin, Seth H. (S) 2209 Cedar St.
Jarrett, Paul E. 315 Citizens Bank Bldg.
Jones, Albert T. 3316 Cherry Rd.
Jones, David G. 126 W. 12th St.
Jones, Horace E. 1110 Meridian St.
Kelly, Wendell C. 704 E. Eighth St.
Kiely, John T. 1931 Brown St.
King, Joseph W. 1110 N. Meridian St.
Kopp, William R. 333 Jackson St.
Lamey, James L. 447 Citizens Bank Bldg.
Lamey, Paul T. 423 Citizens Bank Bldg.
Land, Richard N. 523 Citizens Bank Bldg.
Larmore, Joseph L. 612 Anderson Bank Bldg.
Litzenberger, Sam W. 610 Citizens Bank Bldg.
Long, Paul L. 710 Anderson Bank Bldg.
McDonald, Virgil G. (S) 1110 Meridian St.
Meister, Doris (S) 315 W. 9th St.
Moneyhun, James E. 621 Citizens Bank Bldg.
Morris, Robert A. 1309 Park Road
Neale, Alfred E. 1931 Brown St.
Nesbit, Leonard L. 415 Citizens Bank Bldg.
Patterson, William K. 713 Anderson Bank Bldg.
Pierce, Fredrick H. Delco Remy Div.
Polhemus, Warren C. 1803 Pearl St.
Quickel, Daniel S. (S) 608 Central Way
Reed, Roger R. 412 Anderson Bank Bldg.
Rosenbaum, Lloyd E. 647 Citizens Bank Bldg.
Ross, Guy E. 1931 Brown St.
Sharp, William L. 449 Citizens Bank Bldg.
Sheldon, Suel A. 508 Anderson Bank Bldg.
Stamper, Joseph H. 412 Anderson Bank Bldg.
Stamper, Robert J. 412 Anderson Bank Bldg.
Starks, William O. 1307 Park Rd.
Stinson, William M. 333 Jackson St.
Taylor, James A. Delco Remy
Wagoner, John R. 708 Anderson Bank Bldg.
Webb, Harry D. 515 Citizens Bank Bldg.
Weiss, Louis L. 1225 N. Madison
Wilder, Gordon B. 338 W. Eighth St.
Williams, Francis M. 1132 Central Ave.
Williams, Robert H. 1132 Central Ave.
Wright, Cecil S. 207 Beverly Terrace

Elwood

Buechler, William F. 1817 S. A St.
Drake, Marion C. 1201 Main St.
Fitzpatrick, Harry W. (S) 1309 S. Anderson St.
Hanson, Martin F. 1102 S. Anderson St.
Hoppenrath, William H. (S) 1300 Main St.
Laudeman, Walter A. 1515 N. A St.
Oldag, George E. 1301½ Main St.
Ploughe, Ralph R. 517 S. Anderson St.
Scea, Wallace A. 1601 S. Anderson St.
Ulrey, Robert P. 1201 Main St.

Austin, Maynard A.
3900 Washington Ave., Evansville

Ferrell, Mars B. Fortville
Bishop, Harry A. Frankton
Hammer, Jay W. 3340 N. Rex Dr., Indianapolis (22)
Ridgway, Alton H. Lapel
Rinne, John I. (S) Lapel
Ayres, Kenneth D. R. R. 1, Markleville
Williams, Robert D. Markleville
Reynolds, Ralph E. Middletown
Heckaman, Edward L. Box 28, Pendleton
Leahy, Howard J. 103 E. State St., Pendleton
Van Ness, William C. Summitville

MARION COUNTY

Beech Grove

Berger, Morley 902 Main St.
Christie, Marvin C. 3655 S. Sherman Dr.
Dill, Charles W. 3655 S. Sherman Dr.
Kim, Young D. 136 N. 17th St.
Ramage, Walter F. 244 S. First St.
Reilly, Eva F. St. Francis Hospital
Zerfas, Charles P. A. 926 Main St.

Steury, Ernest M. 405 W. Main St., Berne
Kime, Edwin N. (S)
1007 Greenwood Ave., Bloomington
Hade, Frederick L. (S)
8925 W. Washington St., Bridgeport
Hasewinkel, Carroll W. R. R. 2, Box 354, Carmel
Godwin, Donald W. 1070 S. Spring St., Evansville
Dupler, Lee F. 400 W. Green St., Frankfort
DeMotte, C. Bowen 540 N. Madison, Greenwood

Indianapolis

A

Addleman, Robert H. 5540 Woodside Dr. (8)
Adkins, Harold C. 409 E. 30th St. (5)
Akre, Philip R. Marion Co. General Hospital (7)
Albertson, Frank P. 3544 W. 16th St. (22)
Albrecht, Willard H. 7400 Hollingsworth Dr. (68)
Aldrich, Harry D. 201 Hume Mansur Bldg. (4)
Aldrich, Howard 4316 E. Washington St. (1)
Alexander, Ezra D. 617 Indiana Ave. (2)
Aldred, Allen W. 2221 W. 79th St. (60)
Alig, Vincent B. 1815 N. Capitol Ave. (2)
All, Barbara B. I. U. Medical Center (7)
Allen, Donald R. Sunnyside Sanitarium (26)
Allen, Robert K. 3202 N. Meridian St. (8)
Alvis, Edmond O. 320 Hume Mansur Bldg. (4)
Anderson, James W. 623 N. West St. (2)
Anderson, Wendell C.
Indiana State Board of Health,
1330 W. Michigan St. (7)
Anshutz, William M. Methodist Hospital (7)
Antreasian, Berj 4829 E. 38th St. (18)
Appel, Richard H. 320 Hume Mansur Bldg. (4)
Arbogast, John L. I. U. Medical Center (7)
Arbuckle, William E. (S) 1150 S. Sheffield (21)
Armer, Robert M. Riley Hospital (7)
Armstead, John W. 2140 N. Capitol Ave. (2)
Arnold, Aaron L. 607 E. 38th St. (5)
Arnold, Robert D. 5470 E. 16th St. (18)
Aronson, Sidney S. 618 Hume Mansur Bldg. (4)
Avery, George O. 17 S. Traub (22)

B

Bachmann, Arnold J. 3440 N. Meridian St. (8)
Badenhauser, Walter E., Jr.
I. U. Medical Center (7)
Baird, Melvin S. 17½ W. 22nd St. (2)
Bakemeier, Otto H. 5503 E. Washington St. (19)
Bakemeier, Robert E. 5503 E. Washington St. (19)
Balch, James F. Jr. I. U. Medical Center (7)
Balch, James F. 709 Hume Mansur Bldg. (4)
Ball, Joseph E. 4312 E. 10th St. (1)
Banks, Horace M. (S)
3631 Forest Manor Ave. (18)
Baptisti, Arthur, Jr.
Marion Co. General Hospital (7)
Barden, Tom P. Marion Co. General Hospital (7)
Barry, Maurice J. (S) 501 Doctors' Bldg. (4)
Bartle, James L. 7450 Pendleton Pike (26)
Bartley, Max D. 607 Hume Mansur Bldg. (4)
Barton, David M. I. U. Medical Center (7)
Bastnagel, William F. 3602 N. Meridian St. (8)
Batman, Gordon W. 1815 N. Capitol Ave. (2)
Battersby, J. Stanley I. U. Medical Center (7)
Batties, Paul A. 2142 N. Capitol Ave. (2)
Bauer, Thomas B. 408 Hume Mansur Bldg. (4)
Baumeister, Herbert E. 4421 E. 75th St. (20)

Baxter, John P.....1633 N. Capitol Ave. (2)
Beach, Robert R.....2630 E. 10th St. (1)
Beaver, Howard W.....8 E. Troy (3)
Beck, Evart M.....915 E. 38th St. (5)
Becker, Harry G.....6060 College Ave. (20)
Beeler, John W.....712 Hume Mansur Bldg. (4)
Beeler, Raymond C. (S)
712 Hume Mansur Bldg. (4)
Belshaw, George.....1640 N. Ritter Ave. (18)
Belt, James H.....6225 Broadway (20)
Benedict, Paul F.....3941 Meadows Dr. (5)
Bennett, Ivan F.
Lilly Clinic, Marion Co. General Hospital (7)
Berman, Edward J...920 Hume Mansur Bldg. (4)
Berman, Jacob K.....920 Hume Mansur Bldg. (4)
Berner, Herbert W. Jr....I. U. Medical Center (7)
Berry, John M.....7841 White River Dr. (40)
Beverland, Malon E. (S)
3036 E. Washington St. (1)
Bibler, Lester D. 1815 Capitol Ave. (2)
Bill, Robert O.....2901 N. Meridian St. (8)
Black, Henry R...Marion Co. General Hospital (7)
Blackford, Florence.....5909 E. 10th St. (19)
Blackford, Ralph E.....5909 E. 10th St. (19)
Blackwell, Donald S.....1815 N. Capitol Ave. (2)
Blake, Albert L.....1802 N. Illinois St. (2)
Blatt, A. Ebner.....3400 N. Meridian St. (8)
Bloemker, Edward F.....2729 Shelby St.(3)
Boggs, Eugene F.....2901 N. Meridian St. (8)
Boling, Grover C.....1440 E. 46th St. (5)
Bomalaski, Martin D.....1927 E. 62nd St. (20)
Bond, George S. (S)....1221 N. Delaware St. (2)
Bond, Virginia.....R. R. 17, Box 364 (23)
Bond, William H.....I. U. Medical Center (7)
Bonsett, Charles A.....902 Hume Mansur Bldg. (4)
Booher, Norman R.....447 E. 38th St. (5)
Booher, Olga Bonke.....447 E. 38th St. (5)
Booker, Harold E. 4901 Norwaldo (5)
Booth, Boynton H....707 Hume Mansur Bldg. (4)
Booze, James H. Marion Co. General Hosp. (7)
Bowers, George W. Methodist Hospital (7)
Bowers, John A...Marion Co. General Hospital (7)
Bowman, George W. (S).....1101 W. 10th St. (7)
Boyer, Floyd A.....442 N. Drexel Ave. (1)
Brady, John P. I. U. Medical Center (7)
Brady, Thomas A. 1815 N. Capitol Ave. (2)
Brayton, John R.....704 Underwriters Bldg. (4)
Brayton, Lee 3930 N. Illinois St. (8)
Brickley, Harry D.... 605 Hume Mansur Bldg. (4)
Brickley, Richard A...605 Hume Mansur Bldg. (4)
Briggs, Robert W.....2140 N. Capitol (2)
Brillhart, James R.....1640 N. Ritter Ave. (18)
Brodie, Donald W.....817 C. of C. Bldg. (4)
Brooks, Fred R., Jr.....3349 Georgetown Rd. (24)
Brown, Archie E.....1220 S. Belmont Ave. (21)
Brown, David E.....1944 N. Capitol Ave. (2)
Brown, DeWitt W.....1633 N. Capitol Ave. (2)
Brown, Frances T.....2126 N. Talbot Ave. (2)
Brown, Frank M.....2875 Clifton (23)
Brown, Gordon T. 3989 Meadows Drive (5)
Brown, Wendell E.....3426 N. Meridian St. (8)
Browning, James S. 3120 N. Meridian St. (8)
Browning, William M.....3426 N. Meridian St. (8)
Brownley, Emma J...2840 N. High School Rd. (24)
Bruce, Reginald A.....848 Indiana Ave. (2)
Brueckman, F. Robert
1815 N. Capitol Ave #401 (2)
Bruetsch, Walter L...3000 W. Washington St. (22)
Burdette, Harold F.....3202 N. Meridian (8)
Burghard, Rolla D.....4829 E. 38th St. (18)
Butler, John O.....234 E. Southern Ave. (25)
Butler, Robert M.....3426 N. Meridian St. (8)

C

Cahn, Hugo M.....418 E. 30th St. (5)
Cahn, Peter H.....315 Hume Mansur Bldg. (4)
Caldwell, Marilyn R.....111 E. 53rd St. (20)
Call, Herbert F.....2901 N. Meridian (8)
Campbell, H. Edwin, Jr..St. Vincent's Hospital (7)
Campbell, John A.....I. U. Medical Center (7)
Campbell, Robert L.....1100 W. Michigan St. (7)
Canaday, James W. (S).....1229 Prospect St. (3)
Cantwell, Edgar R. I. U. Medical Center 7)
Caplin, Irvin 1815 N. Capitol Ave. (2)
Caplin, Samuel S.....4525 Indianola (5)
Carson, Wayne 1802 N. Illinois St. (2)
Carter, James E. I. U. Medical Center (7)
Carter, Oren E.....668 E. 38th St. (5)
Cast, William R.....I. U. Medical Center (7)
Chattin, William R.....4829 E. 38th St. (18)
Chen, Ko Kuei.....I. U. Medical Center (7)
Chernish, Stanley M.
Marion Co. General Hospital (7)
Chevalier, Robert B.
Marion Co. General Hospital (7)
Childress, Richard H.....I. U. Medical Center (7)
Chivington, Paul V...407 Hume Mansur Bldg. (4)
Chroniak, Walter 41 N. Shortridge Rd. (19)
Clark, George A.....922 Hume Mansur Bldg. (4)
Clark, Lawson J.....3736 N. Delaware St. (5)
Clevinger, William G.....1610 Auburn St. (24)
Close, W. Donald.....I. U. Medical Center (7)
Coates, Jacqueline.....2060 N. Senate Ave. (2)
Coggeshall, Warren E.....3524 N. Meridian St. (8)
Cohn, Alvin F.....1120 Southview Dr. (27)
Colbert, Ruth E. D.....Sunnyside Sanitarium (26)
Collins, Hubert L.....985 N. Arlington Ave. (19)
Collins, Robert C.....3414 Clifton (23)
Conley, Joseph L. (S).....405 E. 52nd St. (5)
Conway, Chester C.....4402 E. New York St. (1)
Conway, Glenn.....1620 S. East St. (25)
Cornacchione, Matthew.....814 S. East St. (25)
Cortese, James V.....435 S. East St. (25)
Cortese, Thomas A.....435 S. East St. (25)
Costin, Robert L.....I. U. Medical Center (7)
Coughenour, J. Robert....2809 S. Holt Road (41)
Countryman, Frank W.....1815 N. Capitol Ave. (2)
Craft, Kenneth L. (S) .1002 Hume Mansur Bldg. (4)
Crawford, John A.....321 Hume Mansur Bldg. (4)
Cross, David G.....1002 Troy Ave. (3)
Culbertson, Clyde G.
Eli Lilly & Co., 740 S. Alabama St. (6)
Cullen, Paul K. Sr.....422 Hume Mansur Bldg. (4)
Culloden, William G. 710 E. 46th St. (5)
Cunningham, Gene C.
Eli Lilly & Co., 740 S. Alabama St. (6)
Cure, Charles W.....1815 N. Capitol Ave. (2)
Currie, Robert W.....512 E. 57th St. (20)
Curry, R. Louis.....3375 Forest Manor (18)
Cuthbert, Marvin P.....3400 N. Meridian (8)
Czenkusch, Helen G....2840 High School Rd. (24)

D

Dale, Robert T.....I. U. Medical Center (7)
Daley, Edward H.....1502 N. Emerson (18)
Dallas, Fred R.....1640 N. Ritter Ave. (18)
Dallas, Mary E.
V. A. Hospital, 1481 W. 10th St. (7)
Dalton, William W.....422 Hume Mansur Bldg. (4)
Daly, Joseph M.....234 E. Southern Ave. (25)
Daniel, John C. (S)..1008 Hume Mansur Bldg. (4)
Davidson, Dale A.....1802 N. Illinois St. (2)
Davidson, N. Cort.....3233 N. Meridian St. (8)
Davis, Bennie L.....2426 Northwestern Ave. (23)
Davis, Margaret M.....Methodist Hospital (7)
Davis, Sam J.....908 Hume Mansur Bldg. (4)
Davis, F. Sterling, Jr...922 Hume Mansur Bldg. (4)
Deal, Eleanor H...4909 W. 15th St. Speedway (24)
Dearmin, Robert M.....3233 N. Meridian St. (8)
DeArmond, Murray.....1815 N. Capitol Ave. (2)
DeBrota, John Jr.....I. U. Medical Center (7)
Deever, John W.....4131 Shelby St. (3)
Deitch, Robert D.....4212 Carrollton Ave. (5)
Dennison, Alfred D., Jr...3400 N. Meridian St. (8)
Denny, Forrest L.....3351 W. 10th St. (22)
Denny, James W.....25 N. Ritter Ave. (19)

DeWees, Dwight L.....302 N. Bradley Ave. (1)
DeWester, Gerald M. 3037 S. Meridian St. (27)
Dickson, Carolyn L.....501 N. West St. (2)
Dill, Myron K.....3120 N. Meridian St. (8)
Dilts, Robert L.....2521 E. 38th St. (18)
Dintaman, Paul G.....703 Hume Mansur Bldg. (4)
Dolan, Patrick A.....Methodist Hospital (7)
Donato, Albert M.....1429 Shelby St. (3)
Doran, J. Hal.....720 Hume Mansur Bldg. (4)
Doss, Jerome F...Marion Co. General Hospital (7)
Doty, James R. Jr.
Marion Co. General Hospital (7)
Doughty, Samuel R., Jr.
5258 Channing Circle (40)
Douglas, William T.....I. U. Medical Center (7)
Dowd, Joseph A.....6177 College Ave. (20)
Drew, Arthur L. Jr.....I. U. Medical Center (7)
Dryden, Gale E.....5835 N. Tacoma (20)
Duncan, Stuart J..... 3037 S. Meridian St. (27)
Duncan, William A.....1221 E. 86th St. (40)
Dunkin, Ramon S.....I. U. Medical Center (7)
Dupes, Lowell E.
V. A. Regional Office, 36 S. Penn. St. (4)
Dyar, Edwin W.....3202 N. Meridian St. (8)
Dyke, Richard W..Marion Co. General Hospital (7)
Dyken, Mark L.....I. U. Medical Center (7)
Dyken, Paul R.....I. U. Medical Center (7)
Dzenitis, Andrievs J.....I. U. Medical Center (7)
Dziabis, Marvin D.....Methodist Hospital (7)

E

Earp, Evanson B.....717 Hume Mansur Bldg. (4)
Eastman, Joseph R., Jr.....220 W. 64th St. (8)
Eaton, Edwin R.....5505 N. Keystone Ave. (20)
Eaton, Lyman D.....5505 N. Keystone Ave. (20)
Ebert, J. Wayne.....1125 Southview Dr. (27)
Eberwein, John H. (S)....2322 Wheeler Ave. (18)
Echt, Charles R.....I. U. Medical Center (7)
Egan, Robert L.....Methodist Hospital (7)
Egbert, Herbert L.....5317 E. 16th St. (18)
Eicher, Palmer O.....3400 N. Meridian St. (8)
Eikenberry, Hugh W...616 Bankers Trust Bldg. (4)
Eldridge, Gail E.....1440 E. 46th St. (5)
Elkins, James P.....234 E. Southern Ave. (25)
Ellis, William N.....1640 N. Ritter Ave. (18)
Emhardt, John T.....1621 S. East St. (25)
Emhardt, John W. A. (S)
5424 Washington Blvd. (20)
Evans, Daniel R.....I. U. Medical Center (7)
Evans, Frederick H.....2140 N. Capitol (2)
Evans, Paul V....Marion Co. General Hospital (7)
Everly, Ralph V.....668 E. 38th St. (5)

F

Failey, Robert B.....I. U. Medical Center (7)
Farrell, Joseph T.....2807 E. Michigan St. (1)
Fausset, C. Basil.....2901 N. Meridian St. (8)
Ferry, Francis A.....1429 Shelby St. (3)
Finneran, Joseph C.....1802 N. Illinois St. (2)
Fisch, Charles....Marion Co. General Hospital (7)
Fischer, A. Alan.....1745 Howard St. (21)
Fitzgerald, William J.
303 Fountain Square Theatre Bldg. (3)
Flanagan, Paul M.....3311 N. Meridian St. (8)
Flanders, Robert.....3202 N. Meridian St. (8)
Flanigan, Meredith B.....3305 Rutledge (8)
Fleetwood, Raymond A.
V. A. Hospital, 1481 W. Tenth St. (7)
Fleischl, Herbert.....Central State Hospital (22)
Flick, John J.....1443 N. Pennsylvania St. (2)
Flora, Joseph O.....4317 W. Washington St. (21)
Folkening, Norval C.....234 E. Southern Ave. (25)
Forbes, Robert S.....3049 S. Holt Rd. (41)
Forry, Frank (S)..... I. U. Medical Center (7)
Fortuna, Frank W.....5602 S. Madison Ave. (27)
Fosgate, Harold L.....4301 E. 38th St. (18)
Foster, Lee N.....St. Vincent's Hospital (7)
Foster, Ray D.....1944 N. Capitol Ave. (2)
Fouts, Paul J.....623 Hume Mansur Bldg. (4)
Franklin, William L....508 Hume Mansur Bldg. (4)
Freed, Carl A.....2966 Kessler Blvd., N. Dr. (22)
Freeman, Leslie W.....I. U. Medical Center (7)
Freeman, Max E.....1745 Howard St. (21)
Fromhold, Willis A....611 Bankers Trust Bldg. (4)
Fry, Robert D.....517 Hume Mansur Bldg. (4)
Fulton, William H.....1934 Remington Dr. (27)
Funkhouser, Elmer (S).702 Underwriters Bldg. (4)

G

Gabovitch, Edward R. 401 E. 34th St. (5)
Gaddy, Euclid T.....2602 W. Washington St. (22)
Gaddy, Nelson D.....2602 W. Washington St. (22)
Galloway, John A.....Eli Lilly & Co.,
740 S. Alabama St. (6)
Gambill, J. Randolph.....1315 W. Tenth St. (7)
Gambill, William D.....1633 N. Capitol Ave. (2)
Gammieri, Robert L.....661 E. 49th St. (5)
Garber, J. Neill.....1815 N. Capitol Ave. (2)
Garceau, George J.....508 Hume Mansur Bldg (4)
Gard, Daniel A...Ford Motor Co., Box 19106 (19)
Gardiner, Sprague H.....I. U. Medical Center (7)
Gardner, Austin L.....3400 N. Meridian St. (8)
Gardner, Buckman.....St. Vincent's Hospital (7)
Garfield, Martin D.....3705 College Ave. (5)
Garner, W. Stanley.....2704 E. 62nd St. (20)
Garrett, John D. (S).....402 N. Meridian St. (4)
Garrett, Robert A.....I. U. Medical Center (7)
Geider, Roy A.....1525 Prospect St. (3)
Geisler, Hans E.....Methodist Hospital (7)
Genna, Mary E. Miller..I. U. Medical Center (7)
Genovese, Pasquale
V. A. Hospital, 1481 W. 10th St. (7)
George, Charles L.....1121 E. 80th St. (20)
Gibson, Alois E.....St. Vincent's Hospital (7)
Gibson, Greta Maxine.5744 Broadway Terrace (20)
Gick, Herman H. (S)....2705 E. Michigan St. (1)
Gifford, Fred E.....710 Hume Mansur Bldg. (4)
Gillespie, Charles F.....3400 N. Meridian St. (8)
Gillespie, Jacob E.....523 Hume Mansur Bldg. (4)
Gillim, Parvin D.....I. U. Medical Center (7)
Ginsberg, Stewart T.....1315 W. Tenth St. (7)
Glendening, John L. (S)
7202 N. Meridian St. (20)
Goldenberg, Norman S.....Coleman Hospital (7)
Goldman, Samuel....2117 W. Washington St. (21)
Gooding, Richard A.....I. U. Medical Center (7)
Gormley, Joseph J.....2327 Lafayette Rd. (22)
Gosman, James H.....2901 N. Meridian St. (8)
Graham, Edward W.
V. A. Hospital, 1481 W. 10th St. (7)
Graham, John D.....1802 N. Illinois St. (2)
Gray, Kenneth L.....2727 N. High School Rd. (24)
Grayson, Ted L.....1815 N. Capitol Ave. (2)
Green, Morris.....Riley Hospital (7)
Greene, Morgan E.....1621 S. East St. (25)
Gregory, Robert L.....1743 Shelby St. (3)
Greist, John H.....2901 N. Meridian St. (8)
Griffin, Leslie W.
Allison Div., General Motors, Box 894 (6)
Griffith, Richard S.
Lilly Clinic, Marion Co. General Hospital (7)
Griffith, Ross E.....401 E. 34th St. (5)
Grimes, Hubert N.....2809 E. Michigan St. (1)
Grisell, Ted L.....5317 East 16th St. (18)
Gruber, Charles M.
Lilly Clinic, Marion Co. General Hospital (7)
Gruesen, Robert A.....3400 N. Meridian St. (8)

H

Habegger, Elmer D.....1815 N. Capitol Ave. (2)
Hadley, David.....702 Hume Mansur Bldg. (4)
Haggard, Edmund B....5914 N. Emerson Ave. (20)
Hagman, Norman A...Marion Co. Gen. Hospital (7)
Hall, Frank M.....100 N. Senate Ave. (4)
Hall, Jack H.....Methodist Hospital (7)
Hamer, Homer G. (S)....1711 N. Capitol Ave. (7)
Hamilton, Howard B.....764 S. Emerson Ave. (3)
Hampshire, Donald R..1443 N. Pennsylvania St. (2)
Hancock, John G.....2226 W. Michigan St. (22)

Hann, Eldon C.....1633 N. Capitol Ave. (2)
Hanna, Thomas A.....1608 N. Lynhurst Dr. (24)
Hansell, Robert M.....6049 E. Washington St. (1)
Harcourt, Allan K.....812 C. of C. Bldg. (4)
Harcourt, Robert S.
Marion Co. General Hospital (7)
Harding, M. Richard...308 Hume Mansur Bldg. (4)
Harding, Myron S.....308 Hume Mansur Bldg. (4)
Hare, Earl H. (S)
Indiana State Board of Health 1330 W. Michigan St. (7)
Hare, Laura.....404 Hume Mansur Bldg. (4)
Harger, Robert W.....804 Hume Mansur Bldg. (4)
Harold, Albert H. (S)...7510 Allisonville Rd. (20)
Harold, Norris E. (S).....3545 N. Denny St. (18)
Harris, Carl B.....319 Hume Mansur Bldg. (4)
Harris, Paul N.
Eli Lilly & Co., 740 S. Alabama St. (6)
Harvey, Verne K., Jr.
Indiana State Board of Health 1330 W. Michigan (7)
Harvey, Verne K., Sr.
V. A. Hospital, 1481 W. Tenth St. (7)
Haslinger, Clarence J....2151 E. New York St. (1)
Hatfield, Jack J.....5538 N. Keystone Ave. (20)
Hatfield, Nicholas W.....5851 E. 54th Pl. (26)
Hawk, James H.....3736 N. Delaware St. (5)
Hawtof, David B.....I. U. Medical Center (7)
Haymond, Joseph L.....301 E. 38th St. (5)
Haynes, John T. Methodist Hospital (7)
Hays, Everett L.....2607 Manker Ave. (3)
Healey, Robert J.....3602 N. Meridian St. (8)
Hedrick, Philip W.....1221 E. 86th St. (40)
Heimburger, Robert F.....I. U. Medical Center (7)
Heinlein, Carl L.....2809 S. Holt Rd. (41)
Heinrichs, Harry H. (S)..505 N. Delaware St. (4)
Helmen, Charles H.....I. U. Medical Center (7)
Henderson, Francis G.
Eli Lilly & Co., 740 S. Alabama St. (6)
Henderson, Roscoe C..3131 Northwestern Ave. (23)
Henderson, William P.
520 Hume Mansur Bldg. (4)
Hendricks, Fred A.....6921 N. Keystone Ave. (20)
Hendricks, John W.....911 Hume Mansur Bldg. (4)
Henry, Russell S.....725 Hume Mansur Bldg. (4)
Hepburn, C. K.....1633 N. Capitol Ave. (2)
Hetherington, John A...1633 N. Capitol Ave. (2)
Heubi, John E.....668 E. 38th St. (5)
Hickam, John B.....I.U. Medical Center (7)
Hickman, Jack W..Marion Co. General Hospital (7)
Hickman, Walter F. (S).....1210 Oliver Ave. (21)
Hicks, Murwyn L.....1502 N. Emerson (19)
Hicks, Wilbur P.....310 W. 40th St. (8)
Hieber, Frank R.....3120 N. Meridian St. (8)
Hildebrand, William L...2963 N. Sherman Dr. (18)
Hill, James K.....4701 W. 30th St. (24)
Himler, James M.....809 Underwriters Bldg. (4)
Hines, Don C.
Eli Lilly & Co., 740 S. Alabama St. (6)
Hodges, Fletcher (S).....3160 N. Penn. St. (5)
Hoffman, Herman.....650 E. 38th St. (5)
Hofmann, J. William (S)
323 Hume Mansur Bldg. (4)
Hogan, Michael A.....6214 Broadway (20)
Holland, William M.....I. U. Medical Center (7)
Holman, Jerome E., Sr. (S)...3315 E. 10th St. (1)
Holman, Jerome E., Jr.....3315 E. 10th St. (1)
Holmes, George H., Jr.
313 Hume Mansur Bldg. (4)
Hood, Ainslee A.....3205 Shelby St. (27)
Horwitz, Thomas 421 Hume Mansur Bldg. (4)
Howell, Arthur 2060 Boulevard Pl. (2)
Howell, Joseph D.....760 Bankers Trust Bldg. (4)
Howell, Robert D.....1802 N. Illinois St. (2)
Hoyt, Lester H.....Methodist Hospital (7)
Hoyt, Millard L.....612 Hume Mansur Bldg. (4)
Hubbard, Jesse D.....I. U. Medical Center (7)
Huber, Carl P.....I. U. Medical Center (7)
Hudson, Foster J.....3440 N. Meridian St. (8)
Hull, DeWayne L.....I. U. Medical Center (7)
Hull, Ronald H.....1815 N. Capitol Ave (2)
Hummons, Francis D..2229 Northwestern Ave. (23)
Hunt, Harold R.....I. U. Medical Center (7)
Hunt, Kenneth D....Marion Co. General Hosp. (7)
Hurteau, William W.....Methodist Hospital (7)
Huse, William M.....703 Hume Mansur Bldg. (4)

I

Irvine, William O.....St. Vincent's Hosp. (7)
Irwin, Glenn W., Jr.....I. U. Medical Center (7)
Iske, Paul G.....420 Hume Mansur Bldg. (4)

J

Jackson, Frederick E. (S)..2125 N. Park Ave. (2)
Jackson, James W. (S).....463 W. 32nd St. (8)
Jaeger, Alfred S. (S)..3057 Washington Blvd. (5)
Jaquith, Orville S. (S).....261 Blue Ridge Rd. (8)
Jay, Arthur N.....3400 N. Meridian St. (8)
Jay, James M.....1633 N. Capitol Ave. (2)
Jenkins, Robert E.....3311 N. Meridian St. (8)
Jennings, Frank L. (S)
V. A. Hospital, 1481 W. Tenth St. (7)
Jewett, Joe H.....3120 N. Meridian St. (8)
Jobes, James E.....110 N. Illinois St., #413 (4)
Johnson, Earl H.....I. U. Medical Center (7)
Johnson, Thomas W.....1802 N. Illinois St. (2)
Jones, Allen W.....6060 College Ave. (20)
Jones, David E.....828 C. of C. Bldg. (4)
Jones, Francis P.....4212 E. Michigan St. (1)
Jones, George L.....8933 Southeastern Ave. (19)
Jones, Gordon C.....1517 N. Emerson (19)
Joseph, Rex M. 59 E. Troy St. (3)
Jowitt, Richard H.....1502 N. Emerson (19)
Judd, Donald R.....I. U. Medical Center (7)
Judd, Russell L.....5470 E. 16th St. (18)
Judson, Walter E.....I. U. Medical Center (7)

K

Kahler, Maurice V.....2638 Kessler Blvd. (22)
Kahn, Alexander J.....3120 N. Meridian St. (8)
Kahn, Howard L.....3120 N. Meridian St. (8)
Kaiser, George C.
V. A. Hospital, 1481 W. Tenth St. (7)
Kalb, Everett L. 5934 E. 21st St. (18)
Kalsbeck, John E.....I. U. Medical Center (7)
Kammen, Leo.....3202 W. 16th St. (22)
Karsell, William A. 3989 Meadows Dr. (5)
Katterjohn, James C...313 Hume Mansur Bldg. (4)
Kauffman, Nelson N.....2901 N. Meridian St. (8)
Kebel, Arthur P.....St. Vincent's Hospital (7)
Keenan, George B.....3225 Shelby St. (27)
Keenan, Reid L.....1815 N. Capitol Ave. (2)
Keever, Charles H.....5214 College Ave. (20)
Keiser, Venice D.....5709 Broadway (20)
Kelly, Don E.....702 Underwriters Bldg. (4)
Kennedy, Hunter F.....1229 Prospect St. (3)
Kennedy, Joseph T.....1502 N. Emerson (19)
Kenney, David B.....6032 E. 10th St. (19)
Kenzler, Jack I.....205 Hume Mansur Bldg. (4)
Kerr, Harry R.....2817 E. Washington St. (1)
Ketcham, Jane M. (S).....3906 Ruckle St. (5)
King, Harold I. U. Medical Center (7)
King, William E.....811 Hume Mansur Bldg. (4)
Kingsbury, John K. (S)
5462 E. Washington St. (19)
Kinzel, Robert J. W.....3120 N. Meridian St. (8)
Kirkhoff, Paul J.....5317 E. 16th St. (18)
Kirklin, Oren L. 1802 N. Illinois St. (2)
Kirtley, William R.
Eli Lilly & Co., 740 S. Alabama St.
Kissel, Wesley A.
LaRue D. Carter Hosp., 1315 W. Tenth St. (7)
Kitterman, Harry E.....5317 E. 16th St. (18)
Klain, Benjamin V.....4157 College Ave. (5)
Klepinger, Carol A.....Methodist Hospital (7)
Kneidel, John H.....508 E. 38th St. (5)
Knowles, Charles Y.....5317 E. 16th St. (18)

Knowles, Robert P.....2901 N. Meridian St. (8)
Kohlstaedt, Karl C.
Eli Lilly & Co., 740 S. Alabama St. (6)
Kohlstaedt, Kenneth G.
Eli Lilly & Co., 740 S. Alabama St. (6)
Kooiker, John E.....1815 N. Capitol Ave. (2)
Koons, Karl M. (S)..923 Hume Mansur Bldg. (4)
Kopecky, Robert R.....4131 Shelby St. (27)
Kornafel, L. H.....905 Hume Mansur Bldg. (4)
Kraft, Bennett.....760 Bankers Trust Bldg. (4)
Kriel, William B.....5630 W. Washington St. (21)
Kuntz, Herman W....611 Hume Mansur Bldg. (4)
Kurtz, Fred B. (S).....5520 N. Illinois St. (8)
Kurtz, Philip L.
Eli Lilly & Co., 740 S. Alabama St. (6)
Kwitny, Isadore J.....3400 N. Meridian St. (8)

L

LaDine, Clarence B.....2508 Station St. (18)
Lamb, Emmett B.....205 Hume Mansur Bldg. (4)
Lamb, Russell W.....205 Hume Mansur Bldg. (4)
Lamber, Chet K.....914 Hume Mansur Bldg. (4)
Lamkin, E. Henry Jr.....5525 N. Delaware St. (20)
Landwehr, Alfons.....Sunnyside Sanitorium (26)
Lane, Charlotte E.....2840 N. High School (24)
Lang, Erich K.....Methodist Hospital (7)
Laramore, Ward
V. A. Hospital, 1481 W. 10th St. (7)
Largaespada, Manuel
Marion Co. General Hosp. (7)
Lashmet, Michael H...419 Hume Mansur Bldg. (4)
Lasich, Anthony R.....820 C. of C. Bldg. (4)
Lawson, Allan J.....3740 Central Ave. (5)
Leasure, J. Kent (S)....3060 N. Meridian St. (8)
Leatherman, Harter L.....1531 Broadway (2)
Leffel, James M.....1633 N. Capitol Ave. (2)
Leffler, William T.....2141 E. 52nd St. (5)
Lehman, David P.....I. U. Medical Center (7)
LeMaster, Theodore R.
305 Hume Mansur Bldg. (4)
Leonard, Henry S. (S).....4223 E. 38th St. (18)
Leser, Ralph U.....3233 N. Meridian St. (8)
Levi, Leon.....40 W. 38th St. (8)
Levin, Ralph T.....3400 N. Meridian St. (8)
Lewis, Paul S.....6357 Rockville Rd. (24)
Lewis, R. Earl.....2307 E. Raymond St. (3)
Ley, Glen D.....Methodist Hospital (7)
Lichtenberg, Melvin.....535 E. 38th St. (5)
Lidikay, Edward C.....3989 Meadows Dr. (5)
Lindenborg, Paul G. 3016 N. Arlington Ave. (18)
Lingeman, Raleigh E.....1944 N. Capitol Ave. (2)
Lingeman, Roger E.....2081 N. Emerson Ave. (18)
Link, Goethe (S).....401 N. Illinois St. (4)
Littlefield, Paul A.
4040 Crooked Creek Overlook (8)
Littlefield, Shirley D.
4040 Crooked Creek Overlook (8)
Lloyd, Frank P.....2416 N. Capitol Ave. (8)
Loehr, William M.....I. U. Medical Center (7)
Loomis, Norman S.....5230 N. Kenwood Ave. (8)
Lord, Glenn C.....104 E. 38th St. (5)
Louden, Robert W.....1221 E. 86th St. (40)
Loudermilk, Richard G...635 E. Kessler Blvd. (20)
Loughlin, Lawrence L.....1815 N. Capitol Ave. (2)
Love, George N.....5331 Washington Blvd. (20)
Lozow, David.....3941 Meadows Dr. (5)
Lucas, Clarence A., Jr....2012 Boulevard Pl. (2)
Lukemeyer, George T.....I. U. Medical Center (7)
Lunsford, Thomas E.....1815 N. Capitol Ave. (2)
Lurie, Paul R.....I. U. Medical Center (7)
Luros, J. Theodore.....1633 N. Capitol Ave. (2)
Lybrook, William B....3731 N. Keystone Ave. (18)
Lynn, Gene E.....1815 N. Capitol Ave. (2)

M

MacDougall, John D.....3941 Meadows Dr. (5)
McAlpine. Richard J...5704 N. Keystone Ave. (20)
McAree, Francis E.....5470 E. 16th St. (18)
McBride, James S.....720 E. 80th St. (40)
McCallum, Donald C. 1815 N. Capitol Ave. (2)
McCallum, Joseph T. C. (S)....237 W. 46th St. (8)
McCallum, Robert N.....1922 N. Capitol Ave. (7)
McCarthy, Daniel F. Jr....Methodist Hospital (7)
McCartney, Donald H..918 Hume Mansur Bldg. (4)
McClain, Edwin S. ...414 Hume Mansur Bldg. (4)
McConnaughey, Hal D.....Riley Hospital (7)
McCormick, Charles O., Jr.
3989 Meadows Dr. (5)
McGrath, Michael F.....1929 E. 38th St. (18)
McIntyre, Charles J. (S)..3930 Carrolton Ave. (5)
McIntyre, James M.....2901 N. Meridian St. (8)
McKinley, A. David.....I. U. Medical Center (7)
McLaren, Daniel E.....6000 E. 46th St. (26)
McQuiston, Ralph J.....608 Guaranty Bldg. (4)
McTurnan, Robert W.....5646 N. Illinois St. (8)
Mackey, Harry S. (S).....4309 Central Ave. (5)
Mackey, John E.....3400 N. Meridian St. (8)
Madden, Robert J.....4612 E. Tenth St. (1)
Madtson, A. Ricks..1815 N. Capitol Ave. #307 (2)
Magennis, Herbert L. (S)....3963 N. Tacoma (5)
Malcolm, Russell L., Jr.
I. U. Medical Center (7)
Manalan, Maurice M...5831 E. Washington St. (19)
Manders, Karl L.....3400 N. Meridian (8)
Manion, Marlow W.....601 Hume Mansur Bldg. (4)
Mann, Mortimer.....3426 N. Meridian St. (8)
Manning, K. Randolph....1815 N. Capitol Ave. (2)
Manzie, Michael W.....1633 N. Capitol Ave. (2)
Marks, Maurice I. 2901 N. Meridian St. (8)
Markstone, David H. I. U. Medical Center (7)
Marsh, Carl M.....101 N. Shortridge Rd. (19)
Marshall, Albert L., Jr.
Indiana State Board of Health,
1330 W. Michigan St. (7)
Marshall, Cavins R. (S)..... 43 W. 30th St. (8)
Martin, Hugh E.
Pitman-Moore Co., 1200 Madison Ave. (6)
Martin, Loren H.....2626 W. Washington St. (22)
Martz, Bill L.
Lilly Clinic, Marion Co. General Hospital (7)
Martz, Carl D.....912 Hume Mansur Bldg. (4)
Marvel, Robert J.....3426 N. Meridian St. (8)
Masters, John M.....805 Hume Mansur Bldg. (4)
Masters, Robert J.....805 Hume Mansur Bldg. (4)
Matthew, W. Burleigh..518 Hume Mansur Bldg. (4)
Matthews, Bernard J.....4612 E. 10th St. (1)
Matthews, William M....1122 N. Bolton Ave. (19)
Maxam, B. T.....3524 N. Meridian St. (8)
Mealey, John Jr.....I. U. Medical Center (7)
Megenhardt, Dennis S...1633 N. Capitol Ave. (2)
Meiks, Lyman T.....Riley Hospital (7)
Melin, John R.....1815 N. Capitol Ave. (2)
Mentendiek, Maurice H.
141 Buckingham Dr. (8)
Mericle, Earl W.....1633 N. Capitol Ave. (2)
Merrell, Paul 420 Hume Mansur Bldg. (4)
Merritt, A. Donald I. U. Medical Center (7)
Merritt, Doris H. I. U. Medical Center (7)
Mershon, Jack B.....3508 W. 16th St. (22)
Mertz, John H. O.....1711 N. Capitol Ave. (7)
Michael, Isaac E....2966 Kessler Blvd., N. Dr. (20)
Middleton, Harvey N.....1828 N. Illinois St. (2)
Miller, Frank H.....201 Hume Mansur Bldg. (4)
Miller, Jerry R.....I. U. Medical Center (7)
Miller, John D.....Sunnyside Sanitorium (26)
Miller, Raleigh S.....6211 College Ave. (20)
Miller, Roscoe E.....I. U. Medical Center (7)
Mitchell, George H...6049 E. Washington St. (19)
Moak, Glenn D.....3202 N. Meridian St. (2)
Moenning, John E.
Marion Co. General Hospital (7)
Montgomery, Ralph F.....St. Vincent's Hosp. (7)
Montgomery, William F.
904 Hume Mansur Bldg. (4)
Moore, Donald F.
LaRue D. Carter Hospital, 1315 W. 10th St. (7)
Moore, Harold T.....5802 Allisonville Rd. (20)
Morchan, Samuel.....3769 College Ave. (5)
Morgan, Margaret E.....3400 N. Meridian St. (8)

Moriarty, John R.....5602 Madison Ave. (3)
Morrison, Lewis E.....603 Hume Mansur Bldg. (4)
Morton, Joseph L.....St. Vincent's Hosp. (7)
Morton, Walter P.....3434 Fall Creek Blvd. (5)
Moser, Rollin H.....3524 N. Meridian St. (8)
Moss, Bobby L.....1121 N. Arlington Ave. (19)
Moss, Harlan B.....1640 N. Ritter Ave. (18)
Moss, Herschel C.....1640 N. Ritter Ave. (18)
Mothersill, Mark H. (S).....3650 College Ave. (5)
Mouser, Robert W.....6201 Park Ave. (20)
Mullen, James B.....3120 N. Meridian St. (8)
Muller, Lullus P.....3120 N. Meridian St. (8)
Muller, Paul F.....3311 N. Meridian St. (8)
Muller, Victor H.....St. Vincent's Hosp. (7)
Myers, Charles W. (S).....R. R. 18, Box 256 (24)

N

Nagan, Robert F.....606 Hume Mansur Bldg. (4)
Nay, Richard M.....3524 N. Meridian St. (8)
Need, David J.....342 Mass. Ave. (4)
Need, Louis T.....1927 S. Meridian St. (25)
Need, Richard L.....I. U. Medical Center (7)
Nester, Henry G.....1841 City-County Bldg. (4)
Newman, Daniel M.....I. U. Medical Center (7)
Nicholas, Dennis J.....4365 Wexford (26)
Nie, Louis W.....2901 N. Meridian St. (8)
Nohl, John M.....457 N. Emerson Ave. (19)
Nolin, Richard T.....6007 Michigan Rd. (8)
Nolting, Henry F. (S).....261 W. 40th St. (8)
Norman, William H.....908 Hume Mansur Bldg. (4)
Norris, Max S.....510 Hume Mansur Bldg. (4)
Nourse, Myron H.....1711 N. Capitol Ave. (7)
Nugent, Edwin J.....Allison Div. GMC, Box 894 (6)
Nurnberger, John I.....I. U. Medical Center (7)

O

O'Brian, Earl J.....3041 Lafayette Rd. (22)
Ochsner, Harold C.....3440 N. Meridian St. (8)
Offutt, Andrew C.....Indiana State Board of Health, 1330 W. Michigan St. (7)
Olvey, Ottis N.....3769 Park Ave. (5)
Orders, Clarks E. (S) 4954 W. 15th St., Speedway (24)
Otten, Claude F.....812 C. of C. Bldg. (4)
Overley, Ross A.....LaRue D. Carter Hospital, 1315 W. 10th St. (7)
Overley, Toner M., Jr.....I. U. Medical Center (7)
Owen, John E.....605 Hume Mansur Bldg. (4)
Owens, Tracy C.....2823 N. Meridian St. (8)

P

Pagedas, Tom C.....I. U. Medical Center (7)
Palmer, Charman F.....3400 N. Meridian St. (8)
Palmer, Harley P.....Methodist Hospital (7)
Palmer, Robert M.....I. U. Medical Center (7)
Palmer, Robert W.....3400 N. Meridian (8)
Pandolfo, Harry.....234 E. Southern Ave. (25)
Parker, George F., Jr.....1502 N. Emerson Ave. (19)
Parker, John F.....1706 E. Washington St. (1)
Parker, Portia.....2226 W. Michigan St. (22)
Parr, Robert L.....3043 E. 38th St. (18)
Paskind, Jacob.....Marion Co. General Hospital (7)
Paulissen, George T.....741 Markwood Ave. (27)
Pearson, John S.....American United Life Ins. Co., 30 W. Fall Creek Parkway (6)
Pebworth, Aubrey C. (S).....1625 W. Morris St. (21)
Peck, Franklin B., Jr. Lilly Clinic, Marion Co. General Hospital (7)
Peirce, James D. Eli Lilly & Co., 740 S. Alabama St. (6)
Perlov, Sylvan H.....5505 N. Keystone Ave. (20)
Permer, Erwin.....136 E. 30th St. (5)
Peterson, Deward D. Marion Co. General Hospital (7)
Petranoff, Theodore V. (S).....515 N. Tibbs Ave. (22)
Pettijohn, Fred L. (S).....2460 Central Ave. (5)
Pfaff, Dudley A. V. A. Regional Office, 36 S. Pennsylvania St. (4)
Phillips, David L.....605 E. 38th St. (5)
Pickett, Robert D.....3524 N. Meridian St. (8)
Pierce, Emmett, Jr. Marion Co. General Hospital (7)
Pierce, Raymond O.....3414 Clifton St. (23)
Pilcher, Jack E.....1802 N. Illinois St. (2)
Pittman, John N.....Methodist Hospital (7)
Platis, James M.....I. U. Medical Center (7)
Pontius, Edwin E.....Methodist Hospital (7)
Popplewell, Arvine G. Marion Co. General Hospital (7)
Powell, Richard C.....I. U. Medical Center (7)
Pribble, Robert H. Marion Co. General Hospital (7)
Price, Francis W.....1002 E. Troy Ave. (3)
Price, James O.....512 Hume Mansur Bldg. (4)
Price, Walter S.....I. U. Medical Center (7)
Pryor, Richard C.....6111 College Ave. (20)

Q

Quigley, Joseph B.....5470 E. 16th St. (19)

R

Rabb, Aaron.....Marion Co. General Hospital (7)
Rabb, Frank M.....915 E. 38th St. (5)
Rabb, Harry S.....3139 E. 10th St. (1)
Raber, Robert M.....1633 N. Capitol Ave. (2)
Rader, George S.....1815 N. Capitol Ave. (2)
Rafalski, Thomas A.....3120 N. Meridian St. (8)
Ragan, William D.....3400 N. Meridian St. (8)
Ralston, John D.....Central State Hosp. (22)
Ramsey, Frank B.....1802 N. Illinois St. (2)
Ransburg, Robert C.....Methodist Hospital (7)
Rawls, George H.....1540 Columbia Ave. (2)
Reed, Philip B.....1815 N. Capitol Ave. (2)
Rees, Russel C.....6114 E. Washington St. (19)
Reid, Charles A.....2445 Shelby St. (3)
Reisler, Simon (S).....318 Bankers Trust Bldg. (4)
Reuter, John W.....I. U. Medical Center (7)
Rhamy, Robert K.....I. U. Medical Center (7)
Rhea, Kenneth E.....I. U. Medical Center (7)
Rice, Frederic A.....7017 Pendleton Pike (26)
Rice, Raymond D.....6138 Hillside Ave. (20)
Rice, Raymond M. Eli Lilly & Co., 740 S. Alabama St. (6)
Richardson, Thad T.....513 S. Sherman Dr. (3)
Richter, Arthur B.....720 Hume Mansur Bldg. (4)
Ridgeway, Ora W. (S).....411 E. 16th St. (2)
Ridolfo, Anthony S. Eli Lilly & Co., 740 S. Alabama (6)
Riner, Jack K.....904 Hume Mansur Bldg. (4)
Ritchey, James O.....608 Hume Mansur Bldg. (4)
Ritter, Wayne L.....404 Hume Mansur Bldg. (4)
Robb, John A.....238 Hume Mansur Bldg. (4)
Robertson, Ray B.....6118 E. Washington St. (19)
Rochlin, Isidore.....3202 N. Meridian St. (8)
Roesch, Ryland P.....5444 N. Illinois St. (8)
Roeske, Nancy A.....220 W. Beverly Dr. (5)
Rogers, Donald L.....3426 N. Meridian St. (8)
Rohn, Robert J.....I. U. Medical Center (7)
Roll, John W.....3628 N. Sherman Dr. (18)
Roller, Charles W. (S).....915 Hervey (3)
Romberger, Floyd T., Jr.....3440 N. Meridian St. (8)
Rosenak, Bernard D.....226 Hume Mansur Bldg. (4)
Rosenbaum, Irving, Jr.....401 E. 34th St. (5)
Rosenberg, Gabriel J.....3120 N. Meridian St. (8)
Ross, Alexander T.....I. U. Medical Center (7)
Roth, Bertram S.....6358 College Ave. (20)
Rougraff, Maurice E. American United Life Ins. Co., 30 W. Fall Creek Parkway (6)
Row, D. Hamilton.....906 Hume Mansur Bldg. (4)
Ruddell, Karl R. (S).....3202 N. Meridian St. (8)
Ruddell, Keith R.....3202 N. Meridian St. (8)
Rudesill, Cecil L. (S).....405 Hume Mansur Bldg. (4)
Rudesill, Robert L.....405 Hume Mansur Bldg. (4)
Rupel, Ernest (S).....5735 N. Meridian St. (8)
Russell, John R.....1815 N. Capitol Ave. (2)
Rust, Byron K.....3740 Central Ave. (5)
Rust, Roland B.....3939 Meadows Drive (5)

Ruth, Martin L. 4304 E. Washington St. (1)
Rutherford, Cyrus W. (S)
4601 N. Pennsylvania St. (5)
Ryan, C. David Methodist Hospital (7)
Ryan, Glen V. 2428 W. 16th St. (22)

S

Sage, Russell A. 1944 N. Capitol Ave. (2)
Salb, Max C. 823 C. of C. Bldg. (4)
Sanders, Harry M. 4829 E. 38th St. (18)
Sanders, Marilyn M. Methodist Hospital (7)
Saperstein, Morris
Larue D. Carter Hosp., 1315 W. 10th St. (7)
Schaffer, Edward V. 1815 N. Capitol Ave. (2)
Schechter, John S. 3400 N. Meridian St. (8)
Scheier, Emil W. 1542 Prospect St. (3)
Schermer, Kenneth L. Methodist Hospital (7)
Schlaegel, Theodore F., Jr.
419 Hume Mansur Bldg. (4)
Schlegel, Donald M. 1802 N. Illinois St. (2)
Schmalhausen, Ansel W.
920 Hume Mansur Bldg. (4)
Schmidt, Loren F. 605 Hume Mansur Bldg. (4)
Schmoyer, Maurice R. . . . Community Hospital (19)
Schneider, Carl J. 1008 N. Beville Ave. (1)
Schneider, Paul A. 4829 E. 38th St. (18)
Schnute, Richard B. I. U. Medical Center (7)
Schuchman, Abe 3763 Broadway (5)
Schuchman, Gabriel 3451 College Ave. (5)
Schumacher, Richard R.
Marion Co. General Hospital (7)
Schuster, Dwight W. 1815 N. Capitol Ave. (2)
Schwarz, Anton
Pitman-Moore Co., 1200 Madison Ave. (6)
Scofield, John B. 3120 N. Meridian St. (8)
Scott, George E. 4110 Roland Rd. (8)
Scott, I. Winfield 3400 N. Meridian St. (8)
Scott, John R. 6214 Broadway (20)
Scott, Robert P. 209 Hume Mansur Bldg. (4)
Scott, Samuel L. 6325 Guilford Ave. (20)
Seaman, Charles F. . . . 301 Hume Mansur Bldg. (4)
Sedam, Herbert L. 4548 College Ave. (5)
Segar, Louis H. (S) 818 E. 48th St. (5)
Segar, William E. Riley Hosp. (7)
Sellmer, George W. 1221 E. 86th St. (40)
Sexson, Hiram T. 3731 N. Keystone (18)
Seybert, Thomas C. 6000 E. 46th St. (26)
Shafer, Marion R. 614 Hume Mansur Bldg. (4)
Shanafelt, Donald K. 1802 N. Illinois St. (2)
Shapiro, Burton J. 3440 N. Meridian St. (8)
Sheehan, Francis G. . . . 6049 E. Washington St. (19)
Shelley, Richard J. 5470 E. 16th St. (18)
Sherster, Harry 1135 S. Meridian St. (25)
Shipley, Edward
Larue Carter Hospital, 1315 W. Tenth St. (7)
Shullenberger, Wendell A.
1815 N. Capitol Ave. (2)
Shumacker, Harris B., Jr. . . I. U. Medical Center (7)
Sicks, Okla W. 607 E. 82nd St. (20)
Sidebottom, Earl W. . . 507 Hume Mansur Bldg. (4)
Siderys, Harry 3941 Meadows Dr. (5)
Siebe, Jack C. 4829 E. 38th St. (18)
Siersdorfer, Theodore N. (S)
5559 W. Morris St. (21)
Sigmond, Harvey W. . . 321 Hume Mansur Bldg. (4)
Silver, Richard A. 712 Hume Mansur Bldg. (4)
Simmons, James E. . . . I. U. Medical Center (7)
Simms, J. Leon 2453 Northwestern Ave. (23)
Simpson, William D. . . 6049 E. Washington St. (19)
Sims, J. Lawrence 3400 N. Meridian St. (8)
Singco, Bienvenido 5202 N. Illinois St. (8)
Sisk, Phillip B. I. U. Medical Center (7)
Slichenmyer, Jack E. 1944 N. Capitol Ave. (2)
Sluss, David H. 808 C. of C. Bldg. (4)
Smith, David L. 2901 N. Meridian St. (8)
Smith, E. Rogers (S) . . 822 Hume Mansur Bldg. (4)
Smith, Francis C. 1102 N. Irvington Ave. (19)
Smith, Roy Lee 707 Underwriters Bldg. (4)
Smith, Stephen M. Methodist Hospital (7)
Smith, William B. . . 2229 Northwestern Ave. (23)
Snider, Byron 2717 S. East St. (3)
Solomon, Reuben A. . . . 414 Hume Mansur Bldg. (4)
Soper, Hunter A. 3524 N. Meridian St. (8)
Souter, Martha C. 3360 N. Meridian St. (8)
Sovine, Joe W. 504 Hume Mansur Bldg. (4)
Spahr, John F., Jr. 3440 N. Meridian St. (8)
Spalding, Joseph J. 706 Hume Mansur Bldg. (4)
Spangler, John S. Methodist Hospital (7)
Sparks, Alan L. 1024 Hume Mansur Bldg. (4)
Spears, John M. 7046 Madison Ave. (27)
Speckman, Glenn H. 2120 E. 10th St. (1)
Spolyar, Louis W. . . Indiana State Board of Health,
1330 W. Michigan St. (7)
Sputh, Carl B., Jr. 301 Doctors' Bldg. (4)
Stadler, Harold E. 41 N. Shortridge Rd. (19)
Stander, Richard W. I. U. Medical Center (7)
Stanley, John S. 142 E. Ohio St. (4)
Stansbury, William E. . . . 3628 N. Sherman Dr. (18)
Staten, Jesse C. Chevrolet Body Div., GMC,
340 White River Pkwy., W. Dr. S. (22)
Stayton, Chester A., Jr.
313 Hume Mansur Bldg. (4)
Steinmetz, Edward F.
Marion Co. General Hospital (7)
Stephens, Donald E. 6332 Guilford Ave. (20)
Stephens, Kuhrman H. . 501 Hume Mansur Bldg. (4)
Stevens, Sydney L. 303 Hume Mansur Bldg. (4)
Stoelting, Vergil K. I. U. Medical Center (7)
Stone, Alvin T. 6202 College Ave. (20)
Stonier, Peter F. Methodist Hospital (7)
Storey, D. Edmund 6225 Broadway (20)
Storey, Joseph L. 3454 N. Illinois St. (8)
Storms, Roy B. (S) 812 C. of C. Bldg. (4)
Strang, William C. LaRue D. Carter Hosp.,
1315 W. 10th St. (7)
Streeter, Ralph T. 3131 E. 38th St. (18)
Strickland, Neil R. 6000 E. 46th St. (26)
Stroup, Tyler J. 216 K. of P. Bldg. (4)
Stucky, Elsworth K. 1349 Madison Ave. (25)
Stump, Loyd K. 3941 Meadows Dr. (5)
Stump, Thomas A.
Marion Co. General Hospital (7)
Suelzer, John G. 1815 N. Capitol Ave. (2)
Suess, Robert E. 41 N. Shortridge Rd. (19)
Sullivan, James J. St. Vincent's Hospital (7)
Summerlin, Jack D. I. U. Medical Center (7)
Surratt, Mary Norris . . . 6160 N. Meridian St. (20)
Sutton, William E. 521 Hume Mansur Bldg. (4)
Swan, John R. 915 Hume Mansur Bldg. (4)
Symmes, Alfred T. 625 E. 38th St. (8)
Szynal, John S. 633 E. 38th St. (5)

T

Takahashi, Masato I. U. Medical Center (7)
Talbott, Dan E. 1802 N. Illinois St. (2)
Tanner, Henry S. 321 Hume Mansur Bldg. (4)
Taube, Jack I. 214 Hume Mansur Bldg. (4)
Taylor, Clifford C. Community Hospital (19)
Taylor, Cyril I. U. Medical Center (7)
Taylor, Frederic W. 3524 N. Meridian St. (8)
Teague, Frank W. 918 Hume Mansur Bldg. (4)
Teixler, Victor A. 224 Hume Mansur Bldg. (4)
Tepfer, Milton Marion Co. General Hospital (7)
Test, Charles E. 1006 Hume Mansur Bldg. (4)
Teter, George V. 1221 E. 86th St. (40)
Tether, Joseph E. 510 Hume Mansur Bldg. (4)
Tharpe, Ray G. 3202 N. Meridian St. (8)
Thatcher, Hugh K., Jr. 4548 College Ave. (5)
Thoman, Rex L. Methodist Hospital (7)
Thomas, Charles R. 405 E. Hanna Ave. (27)
Thomas, Edward P. 917 W. 30th St. (23)
Thomas, Fred A. St. Vincent's Hospital (7)
Thomas, Lowell I. 1815 N. Capitol Ave. (2)
Thomas, Morris E. 1802 N. Illinois St. (2)
Thompson, John V. 7899 Ridge Rd. (20)
Thompson, Joseph F. 6138 N. Hillside Ave. (20)
Thompson, Paul D. . . 423 Hume Mansur Bldg. (4)
Thompson, Wayne H. 5470 E. 16th St. (18)

Thornton, Harold C. 301 E. 38th St. (5)
Throop, Frank B. 3400 N. Meridian St. (8)
Timmons, Gerald D. I. U. Medical Center (7)
Tindall, George T. 6002 Windsor Dr. (18)
Tinsley, Frank W. 3044 LaFayette Rd. (22)
Tinsley, Walter B., Jr. 3044 LaFayette Rd. (22)
Tinsley, Walter B. (S) 603 K. of P. Bldg. (4)
Tischer, E. Paul 208 Hume Mansur Bldg. (4)
Tofaute, John L. Robert Long Hospital (7)
Tondra, John M. 400 Hume Mansur Bldg. (4)
Torrella, Jose A. 5324 W. 16th St. (24)
Tosick, William A.
Marion Co. General Hospital (7)
Toumey, Fred L. 1802 N. Illinois St. (2)
Trudgen, Spencer F. Methodist Hospital (7)
Trusler, H. Marshall I. U. Medical Center (7)
Trusler, Harold M. . . . 408 Hume Mansur Bldg. (4)
Tuchman, Joseph H. 2040 E. 46th St. (5)
Tucker, Warren S. 414 Hume Mansur Bldg. (4)
Tyler, Edward A. I. U. Medical Center (7)
Tyner, Harlan H. 3202 N. Meridian St. (8)

U-V

Ullom, Ralph B. 3524 N. Meridian St. (8)
Van Denbark, Howard M. . St. Vincent's Hosp. (7)
Vandivier, Robert M. 209 Hume Mansur Bldg. (4)
Van Dorn, Myron J. 2165 Weslynn Dr. (8)
Van Fleet, Josephine Indiana State Board of Health, 1330 W. Michigan St. (7)
Van Meter, C. Powell 3419 E. 10th St. (1)
Van Nuys, John D. I. U. Medical Center (7)
Van Tassel, Charles J. 709 Hume Mansur Bldg. (4)
Van Vactor, Helen D. . 226 Hume Mansur Bldg. (4)
Vellios, Frank I. U. Medical Center (7)
Vollrath, Victor J. 5202 N. Illinois St. (8)
Von Der Haar, Gerard . . . 4016 E. Michigan St. (1)
Vore, Robert E. . . . Marion Co. General Hospital (7)

W

Wainscott, Clinton S. 812 C. of C. Bldg. (4)
Waldo, J. Thayer 3989 Meadows Dr. (5)
Walther, Joseph E. 3202 N. Meridian St. (8)
Walton, William M. 1802 N. Illinois St. (2)
Ward, Wesley C. 3 E. 46th St. (5)
Warman, Alvah P. (S) 1363 E. 38th St. (5)
Warneke, Charles H. . . . St. Vincent's Hospital (7)
Warriner, James B. . . . 1012 N. Emerson Ave. (19)
Warvel, John H., Jr. . 614 Hume Mansur Bldg. (4)
Warvel, John H. . . . 614 Hume Mansur Bldg. (4)
Wasserman, Don H. I. U. Medical Center (7)
Wehrman, Jule O. (S)
1408 N. Pennsylvania St. (2)
Weigand, Clayton G. Eli Lilly & Co., 740 S. Alabama St. (6)
Weiss, Jason 4914 W. 16th St. (24)
Weller, Charles A. (S) . . . 3720 N. Delaware St. (5)
West, Joseph L. 6714 Rockville Rd. (41)
Westfall, B. Kemper 2901 E. 38th St. (18)
Westfall, John B. . 1025 Hume Mansur Bldg. (4)
Wheeler, David E. Community Hospital (19)
White, Donald J. 3524 N. Meridian St. (8)
White, Douglas H. 3524 N. Meridian St. (8)
White, John B. Jr. 1815 N. Capitol Ave. (2)
White, Philip T. I. U. Medical Center (7)
Widdifield, G. E. 2614 Madison Ave. (3)
Wilkens, Irvin W. 1743 Shelby St. (3)
Williams, Charles D. 2422 Station St. (1)
Williams, Clifford L. . . Central State Hospital (22)
Williams, Harold W. 6000 E. 46th St. (26)
Williams, Howard S. 115 E. 16th St. (2)
Williams, Hugh L. 4829 E. 38th St. (18)
Williams, Paul D. . . . Central State Hospital (22)
Wilmore, Ralph C.
V. A. Hospital, 1481 W. 10th St. (7)
Wilson, Fred M. I. U. Medical Center (7)
Wilson, Oliver R. 3440 N. Meridian St. (8)
Wirey, Harold R. . . . 6850 S. Madison Ave. (27)
Wise, William R. 2372 Lafayette Rd. (22)
Wishard, William N., Jr. . . 1711 N. Capitol Ave. (7)
Witham, Robert L. 1502 N. Emerson (19)
Woerner, Thomas E. . . 720 Hume Mansur Bldg. (4)
Wolfram, Don J. 208 Hume Mansur Bldg. (4)
Wood, Donald E. 6325 Guilford Ave. (20)
Woodard, Abram S. 668 E. 38th St. (5)
Woolling, Kenneth R. . . 718 Hume Mansur Bldg. (4)
Worley, Joseph P. 5839 E. Washington St. (19)
Worley, Richard H. 5317 E. 16th St. (18)
Wrege, Malcolm L. 1502 N. Emerson Ave. (19)
Wright, J. William, Jr. 301 Hume Mansur Bldg. (4)
Wyttenbach, John E. . . . 503 Hume Mansur Bldg. (4)

Y

Yacko, Michael L. 1502 N. Emerson (19)
Yingling, Robert J. Community Hospital (19)
Young, James W. 6302 Guilford Ave. (20)
Young, John E. 4829 E. 38th St. (18)
Young, John M. 1456 E. 46th St. (5)
Young, John T. 1540 Columbia Ave. (2)

Z

Zell, Evertson H. 812 C. of C. Bldg. (4)
Zeps, E. Frances Indiana State Board of Health, 1330 W. Michigan St. (7)
Zerfas, Phyllis K. R. R. 1, Box 220 (27)

Wagner, Anabel R. 405 Life Bldg., Lafayette
Wagner, Lindley H. 405 Life Bldg., Lafayette
Lansford, Kenneth G.
1200 Michigan Ave., LaPorte
Lewis, Robert J. . 4350 Franklin Rd., Lawrence (26)
Peck, Franklin B., Sr. R. R. 1, Monticello
Asher, Ernest O. (S)
4730 W. 72nd St., New Augusta
Asher, James W. . . 4730 W. 72nd St., New Augusta
Paynter, Morris B. 59 Union St., Southport
Anderson, John T., Pitman-Moore Co.,
9550 Zionsville Rd., Zionsville

Adams, Daniel S. (S)
2532 Columbus Dr., Ft. Myers, Fla.
Barrett, Robert V. Army Hosp., Fort Ord, Calif.
Bohner, Caryle B. Huasca, Hidalgo, Mexico
Boling, Frederick F. US PHS, St. Louis, Mo.
Brayton, John R., Jr.
Naval Hospital, Oakland, Calif.
Breneman, William L.
7915 Pine Brook Ave., San Antonio, Texas
Brose, Paul E. 5010th USAF Hosp., AAC, APO 937, Seattle, Wash.
Brown, Thomas C. Kaiser Hosp., 1697 Ala Moana Blvd., Honolulu, Hawaii
Bugh, Charles W.
1075 Riverview Dr., Fairbanks, Alaska
Call, William H.
University Hospital, Ann Arbor, Michigan
Close, Gerald A.
Nyadiri Methodist Mission, P. B. 636, E. Salisbury, S. Rhodesia, Africa
Coade, George E.
5814 W. 96th St., Los Angeles, Calif.
Coddington, Robert C.
U. S. Army Hosp., Ft. Campbell, Ky.
Cregger, Irbey E.
1360 USAF Hosp., Orlando AFB, Florida
Cullen, Paul K., Jr.
Mayo Clinic, Rochester, Minnesota
Dirks, Kenneth R. 10th Med. Lab., Landstuhl Army Med. Center, APO 180, N. Y., N. Y.
Donahue, James, Rodriguez Army Hosp., APO 851, New York, N. Y.
Eckberg, Theodore J.
U. S. Naval Hosp., Memphis 15, Tenn.
Fisher, Frank C. . . 379 Linwood Ave., Buffalo, N. Y.
Fisher, Gerald Ippy, French Equatorial Africa
French, Richard N.
USAF Hosp., Lackland AFB, Texas

Gabe, William E.
61 Heather Lane, Orinda, California
Gabrielsen, Ted H.
700 Brompton Ave., Chicago 13, Ill.
Gilliland, John E.
Ruth Thaeler Hosp., Bilwaskarma, Nicaragua
Glover, John L.
Army Chemical Center, Edgewood, Md.
Graham, William E.
401st TAC Hosp., England AFB, Alexandria, La.
Hathaway, C. Bishop
Irwin Army Hosp., Ft. Riley, Kan.
Hurt, LaVerne B.
3102 Palm Ave., Delray Beach, Fla.
Jones, Roland W.
2d Marine Div., FMF, Camp Lejeune, N. C.
Kammen, Robert
2136 Barclay Rd., Oklahoma City, Okla.
Kenoyer, Wilbur L.
36 TAC Hosp., APO 132, N. Y., N. Y.
Klingerman, John J.....Camp Roberts, California
Kurlander, Gerald K..28 Manor Dr., Red Bank, N. J.
Kurtz, Richard
4302-6 O'Donnell Hdqts., Ft. Riley, Kans.
Lawler, George F...P. O. Box 923, Cape Coral, Fla.
Little, John W. (S)..30 De Claire Rd., Decatur, Ill.
McGuff, Paul.....250 Winter St., Weston, Mass.
McLain, Clarence R...Wright-Patterson AFB, Ohio
Mann, Richard E.....Parris Island, N. C.
Mertz, Henry O., Sr. (S)
R. R. 2, Box 1619, Nokomis, Florida
Moore, Richard B.
931 St. Paul Ave., #9, St. Paul, Minn.
Moore, William G.
U. S. Army Hosp., Ft. Hood, Texas
Morrow, Dean H.
Nat'l. Institutes of Health, Bethesda, Maryland
Murray James S.
980 Mission Terrace, Camarillo, Calif.
Musser, A. Wendell..U. S. Army, Ft. Bragg, N. C.
Myers, Roy V. (S)
7710 Beta Circle, West Palm Beach, Fla.
Nelson, John W.
418 Medical Cnt. Dr., #303, Morgantown, W. Va.
Ochsner, Harold C. Jr.
865th Med. Grp., Offutt AFB, Nebraska
Ormiston, Michael W.
V. A. Hosp., 5901 E. 7th St., Long Beach, Calif.
Parks, Herbert E.
9407 Winsome Lane, Houston 42, Texas
Pearson, Lyman R.
1881 Ridgeway Dr., Clearwater, Fla.
Rapp, George F.
7901 Nill St., R. R. 3, Columbia, S. Carolina
Rea, Ralph L.
3408 Toledo Terrace #4, Hyattsville, Md.
Reibel, Donald B.
U. S. Naval Hospital, Beaufort, S. Carolina
Rhodes, Theodore D.
R. R. #2, Box 1595, Nokomis, Fla.
Ricketts, Joseph W. (S)
136 Magnolia Drive, Orman Beach, Florida
Rigg, John F.
1279 N. E. 97th Street, Miami Shores, Florida
Robinson, Frank C. (S)
200 Via Mentone, Newport Beach, Calif.
Rogers, Thomas P.
6142 LaPintura Dr., La Jolla, Calif.
Rudolph, Stephen J., Jr.
832nd TAC Hosp., Cannon AFB, New Mexico
Scheeringa, Ronald H.
1222 Meridene, Baltimore, Md.
Talarico, Leonard H.
219 Orlando Rd., Rochester 22, N. Y.
Thurston, Harrison S. (S)
1204 Earlham Drive, Dayton 6, Ohio
Wilson, David O.
3650-A Morton Rd., Ft. McClellan, Ala.
Ziperman, H. Haskell
97th Gen. Hospital, APO 757, New York, N. Y.

MARSHALL COUNTY

Hampton, James N.....Argos
Kelly, Frank (S).....Argos
Connell, Vactor O.....Bourbon
Marshall, George L. (S).....Bourbon

Bremen

Bowen, Otis R.....424 W. South St.
Burket, Cecil R.....424 W. South St.
Cripe, Earl P.....119 N. Center St.
Schreiner, John E.....201 E. Plymouth
Stine, Marshall E.....424 W. South St.

Culver

Baker, Milan D.....Culver Military Academy
Hippensteel, Russell R.....121 College Ave.
Howard, Joseph D.....112½ N. Main St.
Norris, Ernest B.....2805 E. Shore Dr.
Reed, Donald W.....121 Mill St.

Plymouth

Coursey, James O.....109 N. Walnut St.
France, Lloyd C.....1223 N. Center St.
Guild, John K.....1167 Pennsylvania
Kubley, James D.....304 N. Walnut St.
Peterson, Ronald L.....121 E. Garro St.
Reed Robert G. Jr.....109 N. Walnut St.
Reno, Edward C.....700 Ferndale St.
Rimel, James F.....1223 N. Center St.
Robertson, James S.....304 N. Walnut St.
Vore, Louring W.....121 E. Garro St.

Thompson, Alfred A. (S).....Tyner

MARTIN COUNTY

(See Daviess-Martin)

MIAMI COUNTY

Shrock, Ethan E.....Amboy
Malott, Fred R.....Converse
Sennett, William K.....Macy
Rendel, Harold E.....Mexico

Peru

Barnett, Ralph E.....65 N. Miami St.
Carlson, Edward A. (S).....11½ W. Main St.
Ferrara, Donald W.....18 W. Fifth St.
Ferrara, Samuel J.....18 W. Fifth St.
Guthrie, James U.....331 W. Third St.
Herd, Cloyn R.....15 S. Wabash St.
Hill, Lloyd L.....65 N. Miami St.
Malouf, Stephen D. (S).....53 S. Broadway
Snyder, Parker W.....65 N. Miami St.

MONROE COUNTY

(See Owen-Monroe)

MONTGOMERY COUNTY

Crawfordsville

Alexander, Stephen J.....306 Ben Hur Bldg.
Baird, Malcolm K.....411 Ben Hur Bldg.
Burks, Jess E.....411 Ben Hur Bldg.
Cornell, Robert A.....206 Ben Hur Bldg.
Daugherty, Fred N.....120 W. Pike St.
Dodds, Wemple.....Culver Hospital
Eggers, Richard.....120 W. Pike St.
Haller, Thomas C.....411 Tinsley Ave.
Humphreys, John W.....312 Jones Ave.
Kirtley, James M.....416 Ben Hur Bldg.
Lingeman, Byron N.....419 Ben Hur Bldg.
Ludwig, Paul E.....306 Ben Hur Bldg.
Millis, Samuel C.....416 Ben Hur Bldg.
Peacock, Norman F.....219 Ben Hur Bldg.
Pierson, Robert H.....305 E. Main St.
Shannon, Wesley E.....901 Cottage Ave.
Viray, Victoriano G.....411 Tinsley Ave.
Wallace, Hawthorne C.....R. R. Donnelley Co.

Otten, Ralph E.....Darlington
Priebe, Fred H.....Gen. Hosp., Indianapolis
Blix, Fred M.....Ladoga
Davis, William H.....New Market
Kindell, Hurschell D.....New Richmond
Richards, Edgar E.....Russellville
Thompson, Claude N.....Waynetown
Parker, Carl B.....Wingate

MORGAN COUNTY

Martinsville

Brubeck, Robert E.....215 E. Washington St.
Drake, Ellery T.....P. O. Box 110
Eisenberg, David A.....310 N. Main St.
Gray, Leon.....171 E. Washington St.
Miller, Ray D.....290 E. Washington St.
Ostheimer, George.....215 E. Washington St.
Pitkin, McKendree C.....440 Washington St.
Reese, Jay S.....Sunnyside Dr., P. O. Box 30
Van Wienen, John.....60 W. Morgan
Willan, Horace R. (S).....109 S. Jefferson St.
Winter, William P.....1390 E. Columbus

Mooresville

Bivin, James H.....31 S. Indiana
Comer, Kenneth E.....130 Indiana
Kendrick, William M.....130 Indiana
Van Bokkelen, Robert W.....320 N. Indiana

Murphy, Maurice G. (S).....Morgantown
Miller, Robert J.....Paragon

NEWTON COUNTY

(See Jasper-Newton)

NOBLE COUNTY

Bowman, Charles M.....Albion
Nash, Justin R.....Albion
Mattmiller, Everett D.....Avilla
Sneary, Max E.....Avilla

Kendallville

Bryan, Robert E.....705 N. State St.
Gutstein, Richard R. (S).....120 Diamond
Hepner, Herman.....705 N. State St.
Lawson, Isaac H. (S).....125½ S. Main St.
Messer, Frank W.....115 E. Rush St.
Slough, O. Thomas.....112 W. Mitchell
Stallman, Carl F.....409 E. Wayne St.

Ligonier

Hooker, Donald J.....406 S. Main St.
Stone, Robert C.....401 S. Main St.
Stultz, Quentin F.....401 S. Cavin St.

Fipp, August L.....Rome City
Pulskamp, Bertrand H.....Wolcottville

OHIO COUNTY

(See Dearborn-Ohio)

ORANGE COUNTY

Hagan, Marion.....French Lick Springs
Keseric, N. E.....French Lick Springs
Sugarman, Benjamin E.....French Lick Springs
Hodgin, Phillip T.....Orleans
Schoolfield, William E.....Orleans
Clark, Ivan A.....Paoli
Manship, Stanley S.....Paoli
McCalla, Charles X.....Paoli
Spears, John K.....Paoli

OWEN-MONROE COUNTIES

Bloomington

Baxter, Neal E.....306 E. Fifth St.
Bidney, Evelyn B.....321 S. Jordan Ave.
Bomba, Brad.....1920 E. Third St.
Borland, Raymond M.....114 N. Lincoln St.
Buckingham, Richard E.....344 College Ave.
Byrne, Louis.....110 S. Washington St.
Cochran, John F.....Indiana University
Creek, Jean A.....1920 E. Third St.
Egolf, Charles F.....Indiana University
Emery, Charles B., Jr.....611 N. College Ave.
Estes, Ambrose C.....121 E. Kirkwood Ave.
Farr, James C.....119 N. Grant St.
Fowler, Richard R.....104 N. Grant
Geiger, Dillon D.....300 E. Kirkwood
Hardtke, Eldred F.....509 E. Fourth St.
Hepner, Herman S.....312 N. Walnut St.
Hibner, Kermit Q.....117 N. Grant St.
Holland, Deward J. (S).....313 N. College Ave.
Holland, Philip T.....108 W. 7th St.
Holtzman, Paul W.....615 N. College
Houshmand, Cyrus.....422 E. Kirkwood
Hrisomalos, Frank N.....306 E. Fifth St.
Klein, Emanuel.....Indiana University
Link, William C.....110 E. Fourth St.
Lundblad, Wilfred M.....1805 E. Tenth St.
Lyons, Robert E.....321 E. Kirkwood
Manifold, Harold M.....1920 E. Third St.
Marchant, Clarence H.....350 S. College Ave.
McIntire, Clarence R.....Bloomington Hospital
Middleton, Thomas O.....404 E. Seventh St.
Milan, Joseph F.....106 N. Grant St.
Miller, John M.....Indiana University
Owen, Margaret T.....200 S. Washington St.
Pizzo, Anthony.....Bloomington Hospital
Poolitsan, George C.....407 N. Walnut St.
Quarles, E. Bryan.....Indiana University

Ramsey, Hugh S.....307 E. Kirkwood
Rieger, I. Taylor.....102 N. Grant St.
Rogers, Otto F., Jr.....210 N. Washington St.
Rollins, Thomas K.....114 E. Seventh St.
Ross, Ben R.....314 E. Seventh St.
Ross, James B.....314 E. Seventh St.
Schell, Harry D.....422 E. Fifth St.
Schuman, Edith B.....Indiana University
Seagle, William.....111 E. Ninth St.
Sibbitt, Joseph W.....300 E. Kirkwood
Smith, Herschel S.....110 S. Lincoln
Smith, Rodney D. (S).....115 N. Washington St.
Spencer, Beaufort A.....114 N. Lincoln
Stangle, William J.....640 S. Rogers
Syler, Robert W.....Indiana University
Taraba, Ralph W.....Indiana University
Topolgus, James N.....403 N. Walnut St.
Tyler, Stanley H.....Indiana University
Way, James A.....322 East Kirkwood
Wenzler, Paul J.....110 S. Washington St.
Wilson, Talmage L. P. O. Box 1216

Stouder, Charles E.....Ellettsville
Mitchell, George L. (S).....Smithville

Spencer

Brown, Marcel S. 53 W. Market St.
Kay, Oran E. Main and Morgan Sts.
Smith, Frederick R. 452 Lover's Lane

PARKE-VERMILLION COUNTIES

Goodrum, William R.....Cayuga

Clinton

Evans, Frederick J.....242 S. Third St.
Gailey, Ivan L.....231 Walnut St.
Herzberg, Milton.....222 Elm St.
Kercheval, John M.....819 S. Third St.
Somerville, J. W.....Fairview, Clinton
White, Isaac D. (S).....427 S. Fourth St.

Lauer, Dorothy B.....Dana
Webb, Lawrence C.....Dana
Britton, Welbon D.....Montezuma
Minich, William G.....FMC Corp., Newport

Rockville

Beebe, Milton O.....110 York St.
Bloomer, Richard S.....115 N. Market St.
Dowell, Emil H.....Parke Hotel Bldg.
Harstad, Casper.....216 W. High St.
Kempf, Gerald F. Indiana State Hospital for Chest Diseases
May, William D. Indiana State Hospital for Chest Diseases
Noblitt, James S. (S).....Rockville
Pirkle, Hubert B. Indiana State Hospital for Chest Diseases
Zierer, Reuben O.....Indiana State Hospital for Chest Diseases

Fell, Robert M.....Rosedale
White, Chester S. (S).....Rosedale
Greene, Frederick G. (S).....Seelyville
Staff, Robert A.....1239 S. Center St., Terre Haute
Pace, Jerome V.
210 Warman Ave, Indianapolis (22)

PERRY COUNTY

Bush, Hargis R.....Cannelton

Tell City

Dukes, David A.....521 Main St.
Gilbert, Robert G.....Perry Co. Mem. Hosp.
Herr, John W. (S).....622 Main St.
James, John M.....746 Ninth St.
James, Nicholas A. (S).....746 Ninth St.
Kemker, Bernard P.....746 Ninth St.
Lohoff, Lewis C.....507 Main St.
Neifert, Noel L.....507 Main St.
Smith, Fred, Jr.....507 Main St.

Snyder, Earl R. (S) Troy
Ress, Gene E.....Apt. 1112B, Fort Eustis, Va.

PIKE COUNTY

Petersburg

Hall, Donald L.....7th & Poplar Sts.
Omstead, Milton.....110 S. Sixth St.

DeTar, George B. (S).....Winslow

Higgins, James L.
32nd USAF Hosp., Minot AFB, N. Dakota

PORTER COUNTY

Chesterton

Griffin, Joseph P.....Jackson Blvd.
Hall, Thomas C.....621 Broadway
Harless, Clarence M.....123 Indiana Ave.
Read, John E.....114 S. 11th St.
Robertson, William C.....600 E. Morgan

Kleinman, Francis J. (S).....Hebron

Portage

Crise, John R.....14000 Central
Kilmer, Warren L.....14000 Central
Lands, Robert M.....14000 Central
Noonan, Leo C.....14000 Central
Tetrick, Lain.....National Steel Corporation

Valparaiso

Brown, James C.....1005 Campbell St.
Covey, Thomas J.....1 Sheffield Dr.
Davis, Carl M.....202 Indiana Ave.
DeGrazia, Eugene J.....810 LaPorte Ave.
Dittmer, Jack E. 60 Jefferson St.
Dittmer, Thomas L.....23 Lincolnway
Eades, Ralph C.....6 Napoleon St.
Frank, John R. (S).....23 Lincolnway
Gold, Marvin E.....1005 Campbell St.
Green, Leonard J.....1005 Campbell St.
Griffin, Charles G.....813 La Porte Ave.
Klos, Stanley J.....522 W. Lincolnway
Koenig, Robert L.....810 La Porte Ave.
Lee, Robert Y.....808 Lincolnway
Makovsky, Theodore.....1005 Campbell St.
O'Neill, Martin J.....810 LaPorte Ave.
Sacks, Leonard Z.....Porter Memorial Hosp.
Scheimann, Lois.....702 Lincolnway
Schmidt, Richard H.....Porter Memorial Hospital
Stoltz, Robert M. 501 Lincolnway
Vietzke, Paul C. F.....1005 Campbell St.

Gordon, Joseph L.....Wheeler

POSEY COUNTY

Montgomery, Samuel B. (S) Cynthiana
Woods, Arba L. (S) 25 S. E. Second St., #203, Evansville
Ropp, Harold E. New Harmony
Boren, Paul R. Poseyville
Boyle, Carroll L. Poseyville

Mount Vernon

Challman, William B. 431 Walnut St.
Crist, John R. 105 E. Sixth St.
Hirsch, Herman L. 126 W. Fifth St.
Oliphant, Frank W. 701 Mulberry St.
Vogel, L. John 131 W. Third St.

PULASKI COUNTY

Lacy, John D., Jr. Medaryville
Eshelman, Henry R. Monterey

Winamac

Carneal, Thomas E. (S) 111 N. Monticello
Halleck, Harold J. 119 W. Main St.
Hollenberg, Edward L. 210 S. Market St.
Thompson, William R. 111 N. Monticello

PUTNAM COUNTY

Veach, Lester W. Bainbridge
Veach, Richard L. Bainbridge
Gray, Clyde C. (S) Cloverdale
Ellett, John Jr. Coatesville

Greencastle

Dester, Herbert E. Box 76
Dettloff, Frederick R. Alamo Bldg.
Johnson, James B. 105 E. Washington St.
Jones, Lawrence R. 250 Hillsdale Ave.
Nichols, Anne Sackett 707 E. Seminary St.
Schauwecker, Cleon M. 239 Hillsdale Ave.
Smith, A. Wilson DePauw University
Steele, Dick J. Alamo Bldg.
Tennis, George T. Alamo Bldg.
Tipton, William R. 110 S. Vine St.
Wiseman, V. Earle 239 Hillsdale Ave.

RANDOLPH COUNTY

Nixon, Byron Farmland
White, Harvey E. Farmland
Jordan, Leo E. Lynn
Martin, Charles E. (S) Lynn
Shallenberger, Henry R. Modoc
Potter, Richard M. Ridgeville

Union City

Birum, Patricia J. 333 W. Oak St.
Chambers, Carol R. Chambers Medical Clinic
Chambers, Leroy B. Chambers Medical Clinic
Landon, David J. R.R. #2
McClure, Morris E. 333 W. Oak St.
Phipps, Leland K. 227 W. Oak St.
Reid, Robert W. (S) 726 W. Division St.
Wagoner, B. D. Columbia and Lennox St.

Winchester

Dininger, William S. 102 E. South St.
Engle, Russell B. 210 S. Main St.
Koch, Howard W. 208 E. Washington St.
Painter, Lowell W. 124 E. Franklin St.
Slick, Crystal R. 457 Elm St.
Sparks, Paul W. 214 S. Main St.

Ruby, Fred McK. (S)
8128 Brookside Pl., Wauwatosa, Wis.

RIPLEY COUNTY

Freeland, Bill E. 12 E. Boehringer, Batesville
Hisrich, Lloyd W. 222 Maplewood Ave., Batesville
Paras, Jose L. Batesville
Warn, William J. Milan
Lippoldt, Charles L. Oldenburg
Row, George S. Osgood
Smith, R. Lee Osgood
Mauricio, Amado S. A. 226 Main St., Rising Sun
McConnell, William C. Sunman
Parker, John B. Versailles
Hopkins, Lester H.
320 N. Lake St., #208, Gary, Ind.

RUSH COUNTY

McNabb, George B. (S) Carthage
McNabb, Richard C. Carthage
Smith, Stephen D. Knightstown
Sheets, Charles E. Manilla
Worth, C. Willard Milroy

Rushville

Atkins, Clarence C. 225 N. Morgan St.
Corpe, Kenneth F. R. R. No. 4
Dean, Donald I. 4th & Main
Denny, Melvin H. R. R. #4
Ellis, Davis W. 229 N. Morgan St.
Green, Frank H. 134 E. Second St.
Lee, John M. (S) 914 N. Morgan St.
McKee, Harry G. 335 N. Main St.
Norris, Marvin G. 134 E. Second St.
Nutter, Wyndham H. 1003 N. Morgan

ST. JOSEPH COUNTY

Zeitler, Philip S. 1400 Hudson St., Elkhart
Ebin, J. L. 3700 Bellemeade, Evansville
Hartsough, Ralph I. Lakeville
How, John T. (S) Lakeville
Smith, Lee J. 21620 Leeper Rd., Lakeville

Mishawaka

Barone, Carmelo V. 307 W. Fourth St.
Christophel, Verna A. 109 W. Third St.
Farner, James E. 114 Lincolnway E.
Ganser, Richard A. 111 S. Race St.
Gerig, Eldon L. 123 W. Fourth St.
Goethals, Charles J. 602 Lincolnway W.
Macri, Paul A. 116½ W. Third St.
Mahank, Camiel C. 223 S. Spring St.
Malstaff, Comiel M. 113 S. Church St.
Martin, Charles F. 322 S. Mill St.
Reed, Robert F. 1316 Lincolnway E.
Rosenwasser, Jacob 225 Lincolnway E.
Sirlin, Edward M. 109 S. Church St.
Spalding, Wendell L. 427 Lincolnway E.
Stringer, Drennon D. 322 S. Mill St.
Templeton, Ames R. 522 Calhoun St.
Van Rie, Leo P. (S) 116 S. West St.
Walerko, Frank 124 S. Race St.
Walters, Charles E. 319 S. Spring St.
Whitlock, Francis C. 110 N. Race St.
Whitlock, Merle E. 123 W. Fourth St.

Wurster, Herbert C.....221 E. Third St.
Zimmer, Henry J.....119½ Lincolnway W.

Luzadder, John E. New Carlisle
Calvin, Helen M. P. O. Box 38, North Liberty
Calvin, O. Walter P. O. Box 38, North Liberty
Hardy, John J. (S) North Liberty
Warrick, Homer L..... Osceola
Helmen, Harry W. (S).....Rolling Prairie

South Bend

A

Acker, Robert B. (S)....418 Sherland Bldg. (1)
Arisman, Ralph K.....607 Odd Fellows Bldg. (1)

B

Backs, Alton J.....1401 Lincolnway W. (28)
Baran, Charles.....404 Sherland Bldg. (1)
Bartsch, Harvey L.
919 E. Jefferson Blvd., #102 (17)
Beach, Norman F.
919 E. Jefferson Blvd., #107 (17)
Bebensee, Donald L.....122 N. Lafayette Blvd. (1)
Bechtold, Samuel E.
919 E. Jefferson Blvd., #302 (17)
Bell, Horace D.....420 N. Hill St. (17)
Bell, Robert L. 531 N. Main St. (1)
Bennett, Jene R.....531 N. Main St. (1)
Berke, Robert D.....1118 Lincolnway E. (18)
Biasini, Benedict A.....403 Dixie Way North (17)
Bickel, David A.....515 Odd Fellows Bldg. (1)
Birmingham, Peter J. (S)..426 Sherland Bldg. (1)
Bixler, Louis C.
919 E. Jefferson Blvd., #207 (17)
Bodnar, Leslie M.....525 N. Michigan (1)
Bogan, William C.....1512 Hass (15)
Booth, Franklin M.....430 Sherland Bldg. (1)
Borough, Lester D.....710 J. M. S. Bldg. (1)
Brechtl, Harvey J.
919 E. Jefferson Blvd., #104 (17)
Buchanan, Wallace D.
919 E. Jefferson Blvd., #107 (17)
Buechner, Frederick W.....116 N. Main St. (1)
Buslee, Roger M.....531 N. Main Street (1)
Bussard, Clifford F. (S)
202 Whitcomb-Keller Bldg. (1)
Bussard, Frank W.
202 Whitcomb-Keller Bldg. (1)
Butts, Milton A.....118 N. Walnut St. (28)

C

Carter, F. R. Nicholas (S)
2000 E. Jefferson Blvd. (17)
Cassady, James V.....921 Lincolnway E. (18)
Cassady, John R.....921 Lincolnway E. (18)
Clark, William H.....520 Sherland Bldg. (1)
Colip, George D.....514 Sherland Bldg. (1)
Colosey, Frederick J...3121 Mishawaka Ave. (15)
Cook, Gordon C.....719 N. Main St. (1)
Cooper, Harry L. (S)....410 Sherland Bldg. (1)
Culbertson, Carl S.....531 N. Main St. (1)
Custer, Edward W.....Healthwin Hospital (17)

D

Davis, Edward A.....3014 Ardmore Trail
Denham, Robert H.
919 E. Jefferson Blvd., #204 (17)
DeVoe, Kenneth R.....418 N. Michigan St. (1)
Dietl, Ernest L.....820 Sherland Bldg. (1)
Dingley, Albert F.
919 E. Jefferson Blvd., #204 (17)
Dodd, Robert D.....2311 Miami St. (14)
Dolezal, Bernard J.....115 S. Eddy St. (17)
Donnelly, Everett F.....602 N. Michigan St. (1)
Dunlap, D. Logan.....203 J. M. S. Bldg. (1)

E

Eades, R. Charles.....914 E. Jefferson Blvd. (17)
Edwards, Bernard E.....704 N. Main St. (1)
Egan, Sherman L.....203 J. M. S. Bldg. (1)
Engel, Howard R.
919 E. Jefferson Blvd., #403 (17)
English, John P.....122 N. Lafayette Blvd. (1)
Ericksen, Lester G.
919 E. Jefferson Blvd., #207 (17)
Erickson, Gustaf W...122 N. Lafayette Blvd. (1)

F

Feferman, Martin E.
919 E. Jefferson Blvd., #305 (17)
Feldman, Max.....1921 Miami St. (14)
Filipek, Walter J.....311 Odd Fellows Bldg. (1)
Firestein, Ben Z.
919 E. Jefferson Blvd., #307 (17)
Firestein, Ray.....416 Sherland Bldg. (1)
Fish, Edson C.....326 Sherland Bldg. (1)
Fisher, Lawrence F. (S).....1717 E. Colfax (17)
Foley, Hansel O.....919 E. Jefferson Blvd., #408
Forrest, O. Norman, Jr.....719 N. Main St. (1)
Frank, Herbert..919 E. Jefferson Blvd., #202 (17)
Frank, Lyall L., Jr.....224 W. Navarre (1)
Frank, Lyall L. 224 W. Navarre (1)
Frash, De Von W., Jr.....1910 Miami (14)
Frash, De Von W.....1910 Miami (14)
Frey, William B.....316 N. Ironwood Dr. (15)
Friedman, Morris S.
919 E. Jefferson Blvd., #402 (17)
Frith, Louis G.....521 W. Washington Ave. (1)

G

Gaffney, Raymond.....535 W. Colfax Ave. (1)
Gates, George E.....122 N. Lafayette Blvd. (1)
Gilman, Marcus M.....401 Odd Fellows Bldg. (1)
Godersky, George E.
919 E. Jefferson Blvd., #106 (17)
Graf, John P.....326 Sherland Bldg. (1)
Green, G. Richard.....822 Sherland Bldg. (1)
Green, George F. 825 Sherland Bldg. (1)
Green, Norval E.....704 N. Main St. (1)
Grillo, Donald.....226 Sherland Bldg. (1)
Grorud, Alton C.....122 Lafayette Blvd. (1)
Grove, James H.
919 E. Jefferson Blvd., #107 (17)

H

Haley, Paul E.....816 Sherland Bldg. (1)
Hall, James M.....914 E. Jefferson Blvd. (17)
Hamilton, Charles O.....527 N. Michigan (1)
Hanley, Harriet F.
919 E. Jefferson Blvd., #101 (17)
Haugseth, Ellsworth K...122 Lafayette Blvd. (1)
Hawkins, Glen E.....527 N. Michigan (1)
Helmer, John F. 826 Sherland Bldg. (1)
Hilbert, John W. (S)..410 W. Washington Ave. (1)
Hildebrand, John O., Jr...1307 E. Ewing Ave. (14)
Hill, Theodore A.....107 N. Eddy (17)
Hill, Wallace C.
919 E. Jefferson Blvd., #306 (17)
Hillman, William H. (S)
1317 Marquette Blvd. (16)
Holdeman, Lillian S.....228 S. St. Joseph St. (1)
Holdeman, Richard W..404 N. Lafayette Blvd. (1)
Holtzman, Norman N.....3123 S. Michigan (14)
Houser, D. Stanley.....2314 Miami (14)
How, Louis E.....513 W. Indiana Ave. (14)
Hyde, Carroll C.....122 N. Lafayette Blvd. (1)

J-K

Jankowski, Ernest B.....411 S. Sheridan Ave. (19)
Johns, Nicholas C.....116 E. Jefferson Blvd. (1)
Kamm, Bernard A.....526 Sherland Bldg. (1)
Karn, John W.....326 Sherland Bldg. (1)
Knapp, Arthur L. (S) .2215 Mishawaka Ave. (15)
Knode, Kenneth T.....729 Sherland Bldg. (1)
Krueger, John E.....326 Sherland Bldg. (1)
Kuhn, Frederick L.....1215 S. Michigan (18)

L

Lamb, J. Leonard
919 E. Jefferson Blvd., #401 (17)
Lane, William H.....418 N. Main St. (1)
Lang, Joseph E.....318 Sherland Bldg. (1)
Lawrence, John O.....3102 Sunnymede Ave. (15)
Lester, Vern L.
919 E. Jefferson Blvd., #107 (17)
Levatin, Bernard I.
919 E. Jefferson Blvd., #303 (17)
Levkoff, Abner H.
919 E. Jefferson Blvd., #101 (17)
Lionberger, John R.
919 E. Jefferson Blvd., #207 (17)
Liss, Emanuel C.....119 S. Eddy (17)
Lockhart, Philip B.
919 E. Jefferson Blvd., #107 (17)

M

MacDonell, Eldred H...122 N. Lafayette Blvd. (1)
Marquis, Gordon.....120 N. Lafayette Blvd. (1)
Martinov, William E.
919 E. Jefferson Blvd., #301 (17)
Mason, Bernard A.....122 N. Lafayette Blvd. (1)
Mauzy, Merritt C.....919 E. Jefferson Blvd. (17)
McCraley, William J.....218 S. Francis (17)
McDonald, Ralph M.....502 J. M. S. Bldg. (1)
McFarland, Corley B...122 N. Lafayette Blvd. (1)
McMeel, James.....1138 Whitehall Dr.
Metcalfe, Grant E.
919 E. Jefferson Blvd., #308 (17)
Miller, Milo K. (S)....122 N. Lafayette Blvd. (1)
Mott, Cassell A...1301½ W. Washington St. (16)
Mueller, Hilbert M...122 N. Lafayette Blvd. (1)
Murphy, Eugene C.....122 N. Lafayette Blvd. (1)
Murphy, Josephine F.....111 W. Bartlett St. (1)
Myers, Philip R.....1002 Lincoln Way W.

N-O

Neher, John L.....17615 State Rd. 23
Nelson, F. Dale.....704 N. Main St. (1)
Nelson, Raymond E.....206 E. Bartlett St. (1)
Olson, Donald T.
919 E. Jefferson Blvd., #309 (17)
Olson, Kenneth L.
919 E. Jefferson Blvd., #207 (17)
Oren, William F.
919 E. Jefferson Blvd., #301 (17)
Orr, W. Robert 525 N. Michigan St. (1)

P

Pairitz, Frank D.....60649 U. S. 31 (14)
Parsons, Robert L.....919 E. Jefferson Blvd. (17)
Pascuzzi, Chris A.....531 N. Main St. (1)
Pauszek, Thomas B....704 W. Washington St. (6)
Petrass, Andrew (S).....516 Sherland Bldg. (1)
Phelps, Stephen R.....818 Sherland Bldg. (1)
Plain, George.....122 N. Lafayette Blvd. (1)
Proudfit, Charles H.
919 E. Jefferson Blvd., #304 (17)
Pyle, Harold D.....119 S. Eddy St. (17)

R

Rasmussen, Ruth F...122 N. Lafayette Blvd. (1)
Rigley, Edward L.....408 Sherland Bldg. (1)
Roberts, Billy J.....3123 Mishawaka Ave. (15)
Rodin, Herman H.....822 Oakridge (17)
Rosenheimer, George M...418 N. Michigan St. (1)
Rubens, Eli.....2314 Miami (14)
Rudolph, Carl J.....110 W. Bartlett St. (1)

S

Sanderson, Robert B.....730 Sherland Bldg. (1)
Sandock, Louis F.....428 Sherland Bldg. (1)
Sandoz, Harry H.....612 Odd Fellows Bldg. (1)
Schaphorst, Richard A.....1124 Whitehall Dr. (15)
Schiller, Herbert A.
919 E. Jefferson Blvd., #205 (17)
Scott, Frank M.....122 N. Lafayette Blvd. (1)
Selby, Keith E.....407 Lincolnway W. (1)
Sellers, Francis M.....3209 Mishawaka Ave. (15)
Sharp, Merle C.....717 N. Main St. (1)
Shelley, Edward S.....207 S. Taylor (25)
Shriner, Richard L.
919 E. Jefferson Blvd., #308 (17)
Sisson, Norvel D.....531 N. Main St. (1)
Skillern, Penn G. (S).....1014 E. Fox St. (14)
Skillern, Scott D.....422 Sherland Bldg. (1)
Slominski, Harry H. (S)
708 Odd Fellows Bldg. (1)
Spenner, Raymond W.....726 Sherland Bldg. (1)
Staunton, Henry A.....3016 Mishawaka Ave. (15)
Stiver, Daniel D.....822 Sherland Bldg. (1)
Stogdill, William J.....525 Sherland Bldg. (1)
Stratigos, Joseph S.....527 N. Lafayette Blvd. (1)

T

Thompson, John M.....921 Lincolnway E. (18)
Thompson, Robert A.
913 S. Twyckenham Dr. (15)
Thornton, Maurice J.
919 E. Jefferson Blvd., #107 (17)
Tirman, Wallace S.
919 E. Jefferson Blvd., #207 (17)
Traver, Perry C. (S)....1010 Riverside Dr. (16)

U-V-W-X-Y-Z

Urruti, Arnoldo H.....420 J. M. S. Bldg. (1)
Vagner, S. Bernard
1303½ W. Washington Ave. (16)
Van Fleit, William E.
919 E. Jefferson Blvd., #407 (17)
Vurpillat, Francis J....132 N. Lafayette Blvd. (1)
Wack, James E.....530 W. Indiana Ave. (14)
Walker, Edwin M., Jr.....326 Sherland Bldg. (1)
Ward, James W.....325 Wakewa (17)
Weiss, Eugene.....919 E. Jefferson Blvd. (17)
White, Donald G.....1815 Ireland Road (14)
Wilhelm, Agatha M...1032 E. Wayne at Eddy (17)
Wilson, James M.....919 E. Jefferson Blvd. (17)
Wixted, John F.....919 E. Jefferson Blvd. (17)
Wixted, Julia L.....919 E. Jefferson Blvd. (17)
Zeiger, Irvin L.....3123 Mishawaka Ave. (15)

Blackburn, Erwin....Beatty Mem. Hosp., Westville
Hillman, Marion W.
Beatty Mem. Hosp., Westville
Cline, Kenneth L.....Wyatt

Bassler, Carl R. (S).....R. #4, Niles, Michigan
Fish, Clyde M. (S) ..R. R. 2, Edwardsburg, Mich.
Fujawa, Matthew J.....1499 Lincoln Ave.,
Lakewood 7, Ohio

SCOTT COUNTY

Bogardus, Carl R. 61 Main St., Austin
Castro, Ignacio B. Wanda St., Scottsburg
McClain, Marvin L. 935 First St., Scottsburg
Sabens, James A. 69 Wardell St., Scottsburg

SHELBY COUNTY

Nigh, Rufus M. Fairland
Davis, John A. Flat Rock

Shelbyville

Arata, Lucian A. 327 W. Broadway
Dalton, Wilson L. 117 W. Washington St.
Inlow, Herbert H. 103 W. Washington St.
Inlow, Paul M. 103 W. Washington St.
Inlow, William D. (S) 103 W. Washington St.
Miller, Richard C. 17 Mechanic St.
Moheban, Joseph 120 W. Jackson St.
Paz, Luis 103 W. Washington St.
Richard, Norman F. 103 W. Washington St.
Scott, V. Brown 103 W. Washington St.
Silbert, David B. 17 S. Tompkins
Spindler, Robert D. 165 W. Mechanic St.
Tindall, Paul R. (S) 20 N. Pike St.
Tindall, William R. 505 S. Harrison St.
Tower, James H., Jr. 120 W. Jackson St.
Whitcomb, Roger F. 120 W. Jackson St.

SPENCER COUNTY

Medcalf, Norman L. (S) Lamar
Jolly, Wesley P. (S) Richland
Atchison, Kenneth C. (S) .. 217 Main St., Rockport
Glackman, John C., Jr.
6th and Main Sts., Rockport
Monar, Michael 6th and Main Sts., Rockport

STARKE COUNTY

Leinbach, Earl R. Hamlet

Knox

DeNaut, James F. 4 N. Heaton St.
Henry, Howard J. 107 S. Main St.
Ingwell, Guy B. 201 S. Heaton St.
McClure, Clark 107 S. Main St.

North Judson

Llamas, Dominador F. 520 Lane St.

STEUBEN COUNTY

Angola

Artz, Richard W. 416 E. Maumee
Barton, Robert 416 E. Maumee
Cameron, Don F. 416 E. Maumee
Cameron, Mary H. 416 E. Maumee
Crum, Marion M. 301 E. Maumee
Davis, Claude E. 909 W. Maumee
Hartman, John J. 209 W. Felicity
Kissinger, Knight L. Elmhurst Hospital
Mason, Donald G. 416 E. Maumee
Rausch, Norman W. 416 E. Maumee

Blosser, Blaine A. (S) Fremont
McCormack, Lloyd L. Fremont
Schrepferman, Wayne Hamilton

SULLIVAN COUNTY

Brown, John S. Carlisle
Whipps, Charles E. (S) Carlisle
Dukes, Betty Dugger
Dukes, Frederic M. (S) Dugger
Dukes, Joe E. Dugger
Bethea, Robert O. Farmersburg

Sullivan

Bedwell, Marion H. 16 N. Court St.
Crowder, James H. 112 N. Section St.
Eskew, Kenneth W. 117 W. Washington St.
Maple, James B. (S) 117 W. Washington St.
McClure, Glen 342 S. Main St.
Scott, Irvin H. 117 W. Washington St.

Daugherty, William L. Hutsonville, Ill.
Taylor, John R. 105 N. Main, Palestine, Ill.

SWITZERLAND COUNTY

(See **Jefferson-Switzerland**)

TIPPECANOE COUNTY

Netherton, Clyde R. (S) Chalmers
Derhammer, George L. Brookston
Gish, Howard M. Brookston
Henderson, Robert N. Brookston
Dublin, Madeline P. Francesville
Kresler, Leon E. 101 N. 4th St., Kentland

Lafayette

Ade, Charles H. 2211 South St.
Ade, Mary Keller 2211 South St.
Baker, John R. 405 Life Bldg.
Balkema, Catherine M. 3 N. 21st St.
Bayley, William E. Home Hospital
Bolin, Robert C. 2600 Greenbush St.
Buhrmester, Harry C., Jr. 2600 Greenbush St.
Burkle, John C. (S) 520 Wall St., #7
Burns, John T. 5 N. 25th St.
Bush, Jack A. 405 Life Bldg.
Calvert, Raymond R. 314 N. Sixth St.
Canganelli, Vincent G. 2433 South Ninth St.
Carpenter, James B. 15 N. 25th St.
Cole, Ira 2315 South St.
Coyner, Alfred B. (S) 509 Life Bldg.
Davis, Grayson B. 637 Ferry St.
Davis, Howard B. 2600 Greenbush St.
Deur, Julius J. 1011 Columbia
Donahue, George R. 718 Life Bldg.
Dubois, Ramon B. 23 N. 25th St.
Eaton, Marion J. 214 Life Bldg.
Elliott, Paul W. 35 N. 25th St.
Engeler, James E. 2600 Greenbush St.
Ferguson, William B. 2525 South St.
Fields, Donald C. 2600 Greenbush St.
Flack, Russell A. 1005 Life Bldg.
Fox, R. F. 2600 Greenbush St.
Frasch, Mahlon G. 300 Life Bldg.
Frey, Harley B. 405 Life Bldg.
Gery, Richard E. 2600 Greenbush St.
Gripe, Richard P. 2600 Greenbush St.
Haas, Charles F. 2211 South St.
Hanneman, Robert E. 2600 Greenbush St.
Harden, Murray E. 903 Life Bldg.
Harter, Eli B. 2600 Greenbush St.
Harvey, Bennett B. 35 N. 25th St.
Herrold, George W. 2 N. 26th St.
Holladay, Lloyd J. 411 Life Bldg.
Horswell, Richard R. 2600 Greenbush St.
Hughes, Richard R. 31 N. 25th St.

Hull, James E.....2211 South St.
Hunsberger, Walter G.....2600 Greenbush St.
Hunter, Frank P. (S).....617 Life Bldg.
Johnson, Herbert S.....2600 Greenbush St.
Johnson, Lowell R.....2522 South St.
Jones, David M.....24 N. 24th St.
Karberg, Richard J.....2420 Ferry St.
Klatch, Ben Z.....2211 South St.
Klepinger, Harry E.....824 Life Bldg.
Kohne, Robert W.....3010 Underwood
Kuipers, Fred M.....2600 Greenbush St.
Landis, Charles B.....2211 South St.
Levering, Guy P. (S).....2113 S. Eighth St.
Loop, Frederick A.....914 Life Bldg.
McAdams, Hugh B.....2011 Kossuth St.
McAdams, Robert.....2011 Kossuth St.
McClelland, Donald C. (S)....1021 Highland Ave.
McFadden, James M.....35 N. 25th St.
McKinley, Joseph.....312 Life Bldg.
McKinney, Daniel H.....301 Life Bldg.
Marsh, George W.....1216 Howell
Martin, Joe M.....Wabash Valley Hospital
Marvel, Howard R.....2600 Greenbush St.
Mather, Charles R.....2600 Greenbush St.
Mather, Robert L.....609 Life Bldg.
Miller, Albert J.....35 N. 25th St.
Miller, Roland E.....2200 Scott St.
Mount, William M.....20 N. 24th St.
Neumann, Kenneth O.....618 Life Bldg.
Onorato, Joseph J.....2433 S. Ninth St.
Peyton, Frank W.....2424 Ferry St.
Ratcliff, Frank W.....405 Life Bldg.
Rothrock, Philip W.....2200 Scott St.
Ruschli, Edward B. (S).....510 Life Bldg.
Shively, John L.....2525 South St.
Sholty, William M.....405 Life Bldg.
Smith, Lowell C.....637 Ferry St.
Stahl, Edward T.....2600 Greenbush St.
Steele, Hugh H.....2600 Greenbush St.
Strayer, Joseph W.....612 Life Bldg.
Stuntz, Edgar C.....Wabash Valley Hospital
Taylor, George N.....St. Elizabeth Hospital
Trout, Carl J.....314 N. Sixth St.
Tubbs, George R. (S).....2502 Iroquois Trail
Underwood, George M.
Jefferson Sq. Shopping Center
Van Buskirk, Edmund L.....2600 Greenbush St.
Van Den Bosch, Wallace R.....2216 South St.
Vermilya, Robert W.....405 Life Bldg.
Webster, Paul L.....2600 Greenbush St.
Weller, Wendell A.....2600 Greenbush St.
Williams, Russell S.....2600 Greenbush St.

Wong, Norman F.....Linden
Lind, Jaap J.....Mulberry
Babb, Forrest J.....Stockwell

West Lafayette

Ash, Harold H.....712 Bexley Rd.
Carroll, Bertha Rose.....Purdue University
Crockett, Franklin S. (H).....424 Littleton St.
Hass, Caroline E.....402 Northwestern Ave.
Hass, Thomas W.....402 Northwestern Ave.
Meikle, Louise J. (S).....606 Terry Lane
Peterson, Joel A.....1208 N. Grant St.
Rommel, Clarence H.....456 Northwestern
Russell, Henry T.....1315 N. Grant St.
Schmiedicke, Paul H.....Purdue University
Spurlock, Fae H.....Purdue University
Van Kirk, John R.....724 Northwestern Ave.
Wilms, John H.....Purdue University

TIPTON COUNTY

Haller, Robert L.....Kempton
Stouder, Albert E.....Kempton
Tranter, William F.....Sharpsville

Tipton

Burkhardt, Boyd A.....202 S. West St.
Carter, Jean V.....130 N. Main St.
Compton, George L.....219 N. Independence
Gossard, Meredith B.....308 N. Independence
Kincaid, Raymond K.....202 S. West St.
Kurtz, William A.....202 S. West St.

Ericson, Harold L.....Windfall
Moser, Elmer B. (S).....Windfall

UNION COUNTY

(See Wayne-Union)

VANDERBURGH COUNTY

Evansville

A

Acre, Robert R.....706 Walnut St. (8)
Adler, Raymond N.....714 Second Ave. (10)
Adye, Wallace M.....1307 N. Stringtown Rd. (11)
Alexander, John E.....7720 Lauderdale Dr. (15)
Anderson, Milton H...Evansville State Hosp. (2)
Antes, Earl H.....420 Cherry St. (13)
Arendell, Robert E.....1400 Cass Ave. (14)
Austin, Eugene W.....3700 Bellemeade (15)

B

Baker, Herman M. (S).....715 First Ave. (10)
Baker, Mason R.....1008 S. Evans Ave. (13)
Barclay, Irvin C.....114 S. E. Second St. (8)
Barnhart, Willard T.....701 Chestnut St. (13)
Bebout, Donald E.
Mead Johnson & Co., 2404 Penn. (21)
Beck, Robert E.....600 Mary St. (10)
Begley, Joseph W. Jr..314 S. E. Riverside Dr. (13)
Beisel, Larry H.....420 Cherry St. (13)
Bender, Martin J.....912 Hulman Bldg. (8)
Bennett, Abner P.....412 S. E. Fourth St. (13)
Bissonnette, Roger P.....420 Cherry St. (13)
Boone, Robert D.....420 Cherry St. (13)
Boswell, Robert W. C.....2351 Division St. (14)
Boyd, Stella N.....502 Hulman Bldg. (8)
Brakel, Frank J.....420 Cherry St. (13)
Britt, Robert.....420 Cherry St. (13)
Brockmole, Arnold W.....201 S. E. Third St. (13)
Brown, George W.
Mead Johnson & Co., 2404 Penn. (21)
Brown, Robert L.....419 Edgar St. (10)
Bryan, Stanton L.....607 Hulman Bldg. (8)
Buehner, Donald F.....3700 Bellemeade (15)
Burger, Thomas C.....3700 Bellemeade (15)
Burnikel, Ray H.....527 Sycamore St. (8)
Burress, Clyde R.....723 Mary St. (10)

C

Cacia, John J.....402 S. E. Seventh St. (10)
Carlson, Ralph F.....517 Sycamore St. (8)
Cheydleur, Eleanor P.....2326 Gum St. (14)
Clark, Thomas W.....420 Cherry St. (13)
Clouse, Paul A.....613 S. Weinbach Ave. (14)
Cockrum, William M.....908 Hulman Bldg. (8)
Coleman, Joseph E.....3700 Bellemeade (15)
Combs, Herman T.....807 W. Indiana (10)
Combs, John H.....412 S. E. Fourth St. (13)

Combs, Pearl B. (S).....4109 Lincoln (15)
Cooper, Waller W.....Deaconess Hospital (10)
Corcoran, Patrick J. V.....3700 Bellemeade (15)
Crawford, James H.....221 Chestnut St. (13)
Crevello, Albert J.....3700 Bellemeade (15)
Crimm, Paul D.....Boehne Hospital (12)
Crudden, Charles H...Clearview Sanitarium (10)
Cuff, Steve C.....420 Cherry St. (13)
Cullnane, Chris W.....2312 W. Franklin St. (12)
Cymbala, Bohdan.....St. Mary's Hospital (10)

D

Daves, W. Lawrence.....715 First Ave. (10)
Davidson, Harold H.....420 Cherry St. (13)
Davis, Max D.
Mead Johnson & Co., 2404 N. Penn. (21)
Deems, Myers B.....314 S. E. Riverside Dr. (13)
Denzer, Edward K.....108 S. E. Second St. (8)
Denzer, William O.....108 S. E. Second St. (8)
Dieckman, Herbert S.....3700 Bellemeade (15)
Dodd, Roberts K.....2042 Lincoln Ave. (14)
Downer, Luther H.....521 Oak Street (13)
Drake, Dale W.....St. Mary's Hospital (10)
Durkee, Melvin S.....3700 Bellemeade (15)
Durkin, John W., Jr.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Dutchman, William R.....501 N. Senate Ave.
Dycus, Walter A.....319 N. St. Joseph Ave. (12)
Dyer, Wallace K.....3700 Bellemeade (15)

E

Eisterhold, John A....5300 New Harmony Rd. (12)
Engel, Edgar L.....126 S. E. Seventh St. (8)
Ewer, Robert W.....420 Cherry St. (13)

F

Faith, Ira L.....805 Old Nat'l. Bank Bldg. (8)
Faul, Henry J.....815 Hulman Bldg. (8)
Faw, Melvin L.....420 Cherry St. (13)
Fenneman, Robert J...402 S. E. Seventh St. (8)
Fickas, Dallas.....715 First Ave. (10)
Fisher, William C.....715 First Ave. (10)

G

Garland, Edgar A.....606 S. Weinbach (14)
Garst, Garland R.....3700 Bellemeade (15)
Gaul, L. Edward.....509 Hulman Bldg. (8)
Geller, Samuel.....R. R. 8, Box 143A
Getty, William H.....420 Cherry St. (13)
Giorgio, Douglas J.....916 S. Burkhardt Rd. (15)
Gourieux, E. De Verre.....3700 Bellemeade (15)
Griep, Arthur H.....5414 Madison Ave. (15)
Grimm, William C. H.....420 Cherry St. (13)
Guckien, Joseph L.....609 Hulman Bldg. (8)

H

Hammond, R. Case.....701 Chestnut St. (13)
Hare, Daniel M.....7800 Taylor (15)
Harlan, William L.....3700 Bellemeade Ave. (15)
Harned, Ben K.....420 Cherry St. (13)
Harris, Robert L. 4 Woodmere Lane (15)
Hart, L. Paul.....3700 Bellemeade Ave. (15)
Hartley, Clarence A., Jr.....221 Chestnut St. (13)
Hartz, F. Minton.....123 S.E. Second St. (8)
Hassel, Walter B.....1905 E. Division St.
Heard, Albert.....322 E. Cherry St. (13)
Heinrich, Weston A...314 S. E. Riverside Dr.(13)
Hendershot, Eugene L...412 S. E. Fourth St. (13)
Hermayer, Stephen....220 S. E. Seventh St. (13)
Herrmann, Gordon T.....3700 Bellemeade (15)
Herzer, Clarence C.....322 N. Fulton (10)
Himebaugh, Gilbert J.....115 N. Weinbach (11)
Hobbs, Arthur A.....600 Mary St. (10)
Hobgood, James L.....3700 Washington Ave. (15)
Hoopes, Jane M.....3700 Bellemeade (15)
Hoover, J. Guy.....517 Sycamore St. (8)
Hovda, Richard B.....St. Mary's Hospital (15)
Huggins, Victor S.....715 First St. (10)
Hyatt, Gilbert T.....1106 W. Franklin St. (10)

J

Johnson, Harold V.....2114 W. Franklin St. (12)
Johnson, Stephen L.....521 Sycamore St. (8)

K

Kauffman, Harley M.....219 Walnut St. (8)
Kelly, John B.....420 Cherry St. (13)
Kessler, Robert B.....1338 Division St. (14)
Kiechle, Frederich L.....726 S. E. First St. (13)
Kimmel, George E.....214 Indiana Bank Bldg. (8)
Kincaid, Robert S.....1000 N. Spring St. (11)
Kleindorfer, Roscoe L...819 W. Franklin St. (10)

L

Laubscher, Clarence....6621 Kratzville Rd. (10)
Lawrence, Joseph C.....715 N. First Ave. (10)
Leibundguth, Henry.....3700 Bellemeade (15)
Leich, Charles F.....124 S. E. First St. (8)
Lessure, Alfred P.....420 Cherry St. (13)
Lewis, Earl T.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Lynch, Harold D.....Mead Johnson & Co., 2404 Pennsylvania St. (21)

M

McCool, Joseph H. 1 Woodmere Lane (15)
McDonald, Joseph D.....517 Sycamore St. (8)
McKeon, Edward C.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
MacKenzie, Pierce.....126 S. E. Seventh St. (8)
Manner, Richard J.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Marvel, James A.....420 Cherry St. (13)
Mason, Everett E.....118 S. E. First St. (8)
Mathews, James R.....715 First Ave. (10)
Maxson, Roy V.....401 Mary St. (10)
Miller, LaVerne B.....714 N. Main St. (11)
Miller, Milton J.....15 W. Franklin St. (10)
Mills, Fred E.....Deaconess Hospital (10)
Mino, Robert A.....723 Mary St. (10)
Moehlenkamp, Charles E.
614 N. Governor St. (11)
Moulton, Lillian G.....1 North Barker (12)
Muelchi, Adeline F.....518 Hulman Bldg. (8)
Murphy, Edward U.....901 Hulman Bldg. (8)

N

Nenneker, Henry (S)....1912 Harmonyway (12)
Newnum, Raymond L.....3700 Bellemeade (15)
Newsome, C. K.....415 E. Mulberry (13)
Nicholson, Raymond W.....3700 Bellemeade (15)
Niedermayer, Alfred J..960 Washington Ave. (13)
Nonte, Leo R.....715 First Ave. (10)
Noveroske, Richard J.....Deaconess Hospital (10)

O

Oswald, Robert H.....126 S. E. Seventh St. (8)

P

Pastor, Julius W.....3700 Washington Ave. (15)
Pavlick, Theodore J.....908 Hulman Bldg. (8)
Pemberton, Jack J...319 N. St. Joseph Ave. (12)
Poncher, John R.....3700 Washington Ave. (15)

Porro, Francis W.....3700 Washington Ave. (15)
Present, Julian.....3700 Bellemeade (15)
Price, Shirley G.....420 Cherry St. (13)
Pugh, Willis L.....715 First Ave. (10)

R

Ratcliffe, Albert W.....510 S. E. First St. (13)
Reich, Clarence E.....1209 N. Fulton (10)
Rietman, H. Jerome
Evansville State Hospital (2)
Ritchie, William D.....555 Herndon Dr. (11)
Rittlemeyer, Louis F., Jr.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Ritz, Albert S.....3700 Bellemeade (15)
Robinson, Earle U.....615 Bellemeade (13)
Rosato, Edward J.....19 Chandler Ave. (13)
Rosenblatt, Bernard B.....709 Hulman Bldg. (8)
Royster, George M. (S)
401 Citizens Nat'l. Bank Bldg. (8)
Royster, Robert A.
401 Citizens Nat'l. Bank Bldg. (8)
Rudolph, Kenneth J.....742 Plaza Dr. (15)
Rupper, Warren R.....600 Mary Street (10)
Rusche, Henry J.....313 W. Iowa (10)
Russell, Richard H.....3700 Washington Ave. (15)

S

Schimmelpfennig, Robert W.
1013 Parrett St. (13)
Schirmer, Robert H.....1118 W. Franklin St. (12)
Schneider, Charles P.....2211 W. Franklin St. (12)
Schriefer, Victor V.....1120 N. Main St. (11)
Sheehan, E. Gregg.....420 Cherry St. (13)
Shively, Wyant J.....3700 Washington Ave. (15)
Sinn, Charles M.....715 First Ave. (10)
Slaughter, Howard C.....908 Hulman Bldg. (8)
Slaughter, John C., Jr.....3700 Bellemeade (15)
Slaughter, Owen L.....3700 Bellemeade (15)
Smith, Gordon L.....19 Chandler Ave. (13)
Smith, Roy M.....1307 Stringtown Rd. (11)
Snively, William D., Jr.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Sprecher, Herman C.....527 Sycamore St. (8)
Springstun, Walter R.....715 First Ave. (10)
Stallings, Hugh A.....3700 Bellemeade (15)
Steele, Paul W.....1218B Lincoln Ave. (14)
Sterne, John H.....3700 Bellemeade (15)
Stewart, L. Ray.....St. Mary's Hospital (15)
Stork, Urban F. D.....420 Cherry St. (13)
Strueh, Paul E.....220 S. E. Seventh St. (13)

T

Tager, Stephen N.....3700 Bellemeade (15)
Thompson, Naiad Mason.....420 Cherry St. (13)
Tilden, Margaret H.....700 Mary St. (10)
Tisserand, John B., Jr.....3700 Bellemeade (15)
Tuholski, James M.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Turner, Isabel B.....2208 E. Walnut St. (14)
Tweedall, Daniel C.....715 First Ave. (10)

U-V

Viehe, Robert W. (S).....618 S. Willow Rd. (14)
Visher, John W. (S)
805 Old National Bank Bldg. (8)
VonderHaar, Thomas E.....715 First Ave. (10)

W

Walker, William F.....420 Cherry St. (13)
Walter, Paul A. F., III.....Mead Johnson & Co., 2404 Pennsylvania St. (21)
Walter, Robert F.....1514 S. Kentucky Ave. (14)
Warner, Charles L.....420 Cherry St. (13)
Waters, George E.....Evansville State Hospital (2)
Weber, Edgar H.....123 S. E. Second St. (8)
Weiss, Henry G. (S).....614 Hulman Bldg. (8)
Welborn, Mell B.....420 Cherry St. (13)
Wilhelmus, C. Kenneth.....115 S. E. Seventh St. (8)
Wilhelmus, Gilbert M.....1028 Washington (15)
Willis, Charles F.....1100 S. Bedford Ave. (13)
Willison, George W.....3700 Bellemeade (15)
Wilson, John D.....3700 Bellemeade (15)
Wilson, Ralph.....517 Mary St. (10)
Woods, William P. (S).....5050 Lincoln Ave. (15)
Woodson, Dan E.....28 E. Powell Ave. (13)
Woodward, Ben E.....420 Cherry St. (13)
Wynn, Justice F.....905 Hulman Bldg. (8)

X-Y-Z

Young, C. Curtis.....126 S. E. Seventh St. (8)
Zeier, Francis G.....420 Cherry St. (13)
Zimmerman, Harold.....6 S. E. Second St. (8)
Ziss, Robert C.....216 S. E. Riverside (13)
Zwickel, Ralph E.....906 Hulman Bldg. (8)

Baylor, Joseph P.
123-4 Sirrocco Dr., Minot AFB, N. Dakota
Benson, Wilbur M.....Box 728, Menlo Park, Calif.
Ehrich, William S. (S).....Manning, So. Carolina
Lyman, Frank L.
Geigy Chemical Corp., P. O. Box 430, Yonkers, N. Y.
McClary, Charles W.
357 Behm Dr., Graysville, Illinois
McPherson, Thomas C.
4 W. Fourth Ave., San Mateo, Calif.
Mayberry, Alton R.
1204 Cypress Road, Chapel Hill, N. C.
Newman, Alvin E.
2937 Coral Shores Dr., Ft. Lauderdale, Fla.
Steckler, Robert J.
1335 Newport Circle, Thousand Oaks, Calif.
Wilson, David
3638 Donald Ave., Indianapolis 24, Ind.

VERMILLION COUNTY

(See **Parke-Vermillion**)

VIGO COUNTY

Loving, Jury B.....New Goshen
McIntosh, Wilbert.....Riley
Jett, Clyde W.....Seelyville

Terre Haute

A

Allen, Orris T. (S).....422 Rose Dispensary Bldg.
Allen, William H.....423 Rose Dispensary Bldg.
Anderson, Walter C.....2235 Wabash Ave.
Ault, Roy J.....3050 Poplar St.

B

Bannon, William G.....416 Rose Dispensary Bldg.
Blum, Leon L.....210 Rose Dispensary Bldg.
Bopp, Henry W., Jr.....221 S. Sixth St.
Bopp, James.....Union Hospital
Boyd, H. Clark.....221 S. Sixth St.
Bradley, Stephen C. (S).....916 S. 25th St.
Bristol, Henry M. S.....1218½ Wabash Ave.
Bronson, Paul J.....3050 Poplar St.
Brown, Robert R.....221 S. Sixth St.
Burkle, Robert J.....3050 Poplar St.

C

CaJacob, Melville E.....1000 S. Sixth St.
Caldwell, Milton V.....721 Wabash Ave.
Cavins, Alexander W.....221 S. Sixth St.

Combs, Stuart R. 3050 Poplar St.
Congleton, George C. (S)
308 Merchants National Bank Bldg.
Conforti, Victor P. 221 S. Sixth St.
Conklin, James O. 500 Rose Dispensary Bldg.
Connerley, Marion L. 211 Fairbanks Bldg.
Conway, Thomas J. 221 S. Sixth St.
Crockett, Wayne A. 416 Rose Dispensary Bldg.

D

Davis, Paul E. 1233 Maple Ave.
Denny, E. Rankin 3050 Poplar St.
Dierdorf, Fred W. Union Hospital
Drummy, William W. 221 S. Sixth St.
Dyer, George W. 2235 Wabash Ave.

E

Edwards, Henry G. 6 Rose Dispensary Bldg.

F

Freed, John E., Jr. 1030 S. Sixth St.

G

Gerrish, Donald A. 5206 Clinton Road
Gillotte, Joseph P. 210 Rose Dispensary Bldg.
Goodman, Hubert T. 410 Rose Dispensary Bldg.
Gossom, Donn R. 203 Rose Dispensary Bldg.

H

Harkness, Robert G. 301 Rose Dispensary Bldg.
Haslem, Ezra R. 401 Rose Dispensary Bldg.
Haslem, John R. 221 S. Sixth St.
Hogan, Thomas W. 627 Cherry St.
Hoover, Dewey A. 1218½ Wabash Ave.
Humphrey, Paul E. 1235 Ohio Blvd.
Hunt, Edgar J. R. R. 1

J

Johnson, Edward M. 221 S. Sixth St.
Johnson, Paul D. 822 N. Fifteenth St.
Justin, Renate G. 901 S. 25th St.

K

Kabel, Robert N. 3050 Poplar St.
Krieble, William W. 221 S. Sixth St.
Kunkler, Arnold W. 1700 N. Seventh St.
Kunkler, Joseph (S) 14 S. Fifth St.
Kunkler, William C. (S)
212 Merchants Nat'l Bank Bldg.

L

LaBier, Clarence R. (S) 325 Ohio St.
LaBier, Clarence R., Jr. 325 Ohio St.
Lancet, Robert O. 2101 Wabash Ave.
Lee, James St. Anthony Hospital
Loewenstein, Werner L. 1537 S. Seventh St.
Luckett, Coen L. (S) 211 Fairbanks Bldg.
Lyons, L. Mason 59 S. 18th St

M

McAleese, George B. 1030 S. Sixth St.
McBride, Noel S. 407 Merchants Nat'l Bank Bldg
McCrea, Fred R. 221 S. Sixth St
McEwen, James W. 670 Cherry St
McLaughlin, Gordon C. 3227 Wabash Ave.
Mahoney, Charles L. 221 S. Sixth St.
Malone, Leander A. 721 Wabash Ave.
Mankin, William J. 402 Tribune Bldg.
Mason, Lester M. 312 Merchant Nat'l Bank Bldg.
Mattox, Don M. 1700 N. Seventh St.
Meissel, Robert 920 N. 19th St.
Meyn, Werner P. 221 S. Sixth St.
Miklozek, John E. 1461 S. Seventh St
Milleson, Ann L. M. 826 S. Center St.
Mitchell, John R. 221 S. Sixth St.
Musselman, Glen G. 1021 S. Sixth St.

N-O

Nay, Ernest O. (S) 221 S. Sixth St.
Neudorff, Louis G. 221 S. Sixth St.
Oliphant, Wilmer G. 1021 S. Sixth St.

P

Pearce, Roy V. 1440 S. 25th St.
Pu, Pin H. 1021 S. Sixth St.

R

Reed, Robert C. Union Hospital
Reynolds, Richard J. 2250 Wabash Ave.
Richart, James V. 414 Rose Dispensary Bldg.
Riggs, Floyd C. 2216 Wabash Ave.
Rogers, R. Shirrell 26 N. Sixth St., West Terre Haute
Rourke, Robert F. 1724 N. Seventh St.
Rubin, Milton M. 221 S. 19th St.

S

Sayers, Frank E. (S) 436 Bluebird Dr.
Scherb, Burton E. 104 N. Seventh St.
Schott, Edward J. (S) 653 Oak St.
Schumaker, Robert A. 3050 Poplar St.
Scully, William E. 221 S. Sixth St.
Shanklin, Vernon A. (S) 672½ Wabash Ave.
Showalter, John R. 1233 Maple Ave.
Siebenmorgen, Louis (S) 1200 S. Eighth St.
Siebenmorgen, Paul 1200 S. Eighth St.
Silverman, Norman M. 1634 S. Seventh St.
Speas, Robert C. 402 Tribune Bldg.
Stewart, Walter E. (S) 721 Wabash Ave.
Stoelting, J. Lewis 1724 N. Seventh St.
Strecker, William L. 2006 Wabash Ave.
Strong, Daniel S. (S) 2618 Lafayette Ave.
Sullivan, John M. 1712 Franklin St.

T-U-V

Thom, Julia S. 912 Chestnut St.
Topping, Malachi C. 3050 Poplar St.
Veach, William L. 1235 Ohio St.
Voges, Edward C. 702 College Ave.

W

Walden, Heinz J. 1616 N. Ninth St.
Weber, Joseph G. S. 723 Wabash Ave.
Weinbaum, Jack G. 206 Rose Dispensary Bldg.
Wheeler, Byron C. 3050 Poplar St.
White, James V. 721 Wabash Ave.
Wilson, Fred L. 1501 S. Third St.

X-Y-Z

Zwerner, Paul F. 12 Points State Bank Bldg.

Cristee, James W.
1594-A Stillwell Rd.,
Presidio of San Francisco, Calif.

WABASH COUNTY

Walker, James L. (S) Lafontaine

North Manchester

Balsbaugh, George K. 107 W. Seventh St.
Bunker, Ladoska Z. North Manchester
Cook, Charles E. 114 W. Main St.
Eiler, Paul A. 1104 N. Wayne St.
Seward, George W. 111 E. Main St.
Smith, Lloyd H. 1104 N. Wayne St.
Venable, George L. (S) 106 W. Main St.

Kidd, James G. Roann

Wabash

Boaz, William D. 645 N. Spring St.
Dannacher, William D. 284 N. Wabash
Dragoo, John R. Wabash Professional Bldg.
Dunham, Henry H. Wabash Professional Bldg.
Elward, Carl J. 1280 Columbus
Hanneken, Vincent J. 86 N. Comstock
LaSalle, Richard M. 645 N. Spring St.
LaSalle, Robert M., Jr. 645 N. Spring St.
LaSalle, Robert M., Sr. 645 N. Spring St.
Mills, John F. 24 E. Main St.
Pearson, William E. 290 N. Wabash
Rauh, Robert A. 884 N. Miami St.
Steffen, Julius T. 443 N. Wabash
Stoops, Jean T. 280 N. Wabash
Whisler, Frederick M. (S) 10 W. Hill

Black, Edgar K.
304 S. Mound St., Circleville, Ohio

WARREN COUNTY

(See **Fountain-Warren**)

WARRICK COUNTY

Boonville

Dimmett, James D. 214 S. Second St.
Hoover, Peter B. 223 W. Locust St.
Stover, Wendell C. 125½ S. Second St.
Terry, Robert H. 117 S. Second St.
Wilson, Paul E. (S) 126 N. Third St.

Nelson, Dudley Chandler
Colvin, Robert C. Newburgh
Wilhelmus, Charles M. (S) Newburgh

Radziewicz, Arthur R.
2339 W. McLean, Chicago 47, Ill.

WASHINGTON COUNTY

Tower, Thomas K. Campbellsburg
Carty, Charles B. Pekin
Paynter, William
LaRue D. Carter Hosp., Indianapolis (7)

Salem

Apple, Eddie R. 501 W. Market St.
Coleman, Henry G. Mitchell Bldg.
Episcopo, Arsenius R. 401 W. Mulberry St.
Fultz, Roy L. 304 E. Market St.
Huckleberry, Irvin E. 502 W. Mulberry St.

WAYNE-UNION COUNTIES

Hill, Paul G. Cambridge City
Kenyon, Charles E. Cambridge City
Barton, Willoughby M. Centerville
Hutchison, Donald R. Fountain City
Vance, William C.
1315 W. Tenth St., Indianapolis 7, Ind.

Liberty

Clarkson, Clarence G. 304 E. Union St.
Lewis, James F. 28 E. Union St.
McWilliams, William B. 207 N. Market St.

Richmond

Adney, Frank B. 1015 S. A St.
Ake, Loren 213 Medical Arts Bldg.
Allen, Robert T. 34 S. Seventh St.
Ballenger, William E. 309 Medical Arts Bldg.
Blossom, Paul W. 825 S. A St.
Brooks, G. Tanner 29 S. 12th St.
Brown, Richard J. 84 S. 14th St.
Buche, Frederick P. (S) 106 S. Seventh St.
Coble, Frank H. 51 S. Eighth St.
Cox, Leon T. 1210 E. Main St.
Daggy, Benjamin T. Medical Arts Bldg.
Daggy, James R. 35 S. Eighth St.
Dingle, Paul E. 216 Medical Arts Bldg.
Dreyer, Ralph W. 2 S. W. 17th St.
Ebbinghouse, Tom 98 W. Main St.
Guthrie, James R. 1010 S. A St.
Harmon, Carl J. 407 Medical Arts Bldg.
Hill, Gladys Marie 407 Medical Arts Bldg.
Hill, Harold D. 412 Medical Arts Bldg.
Hunt, Gayle J. Reid Memorial Hospital
Johnson, George M. 1250 Chester Blvd.
Kendall, William 126 S. 24th St.
Kime, Charles E. 1201 S. A St.
Klepfer, Jefferson F. Richmond State Hospital
Kreitl, Dorothy R. Richmond State Hospital
Lee, Glen Ward 139 Medical Arts Bldg.
Ling, John F. 505 First National Bank Bldg.
Logan, James Z. 84 S. 14th St.
Loomis, Charles H. 1203 S. A St.
McIlroy, Richard J. 1912 E. Main St.
Mader, John H. 2000 E. Main St.
Malcolm, Russell L. 127 Medical Arts Bldg.
Meredith, Elwood J. 203 Medical Arts Bldg.
Miller, Harold L. 1250 Chester Blvd.
Millis, Arthur B. 505 First Nat'l. Bank Bldg.
Park, Byron J. 418 Medical Arts Bldg.
Pentecost, Paul S. 1300 Chester Blvd.
Plasterer, Edward D. 212 S. 16th St.
Porter, George S. 808 S. A St.
Ramsdell, Glen A. 1015 S. A Street
Ross, Harry P. 220 S. 19th St.
Runge, Paul W. 1426 E. Main St.
Sage, Charles V. 48 S. 11th St.
Schmitt, Robert W. 36 Circle Drive
Sherer, Kenneth E. 1250 Chester Blvd.
Shields, Tom S. 47 S. 11th St.
Snyder, Morris C. 130 Medical Arts Bldg.
Stamper, Lucian A. 402 Medical Arts Bldg.
Stepleton, John D. Reid Memorial Hospital
Stilwell, William R. 2607 South C Place
Sweet, Howard E. 35 S. Eighth St.
Taylor, William R. (S) 308 Medical Arts Bldg.
Wanninger, Horace 408 Second Nat'l Bank Bldg.
Warrick, Francis B. 1426 E. Main St.
Weinstein, Edwin B. 204 Colonial Bldg.
Weitemier, Raymond A. 2000 E. Main St.
Wertenberger, Morris D. Reid Memorial Hospital
Wiland, Olin K. Reid Memorial Hospital
Wynegar, David E. Richmond State Hospital
Zore, Joseph J. 1308 North A Street

Shepard, Fred F. College Corner, Ohio

WELLS COUNTY

Bluffton

Boonstra, Charles E. 303 S. Main St.
Bradley, Louis F. 303 S. Main St.
Buckner, Joy F. 116 E. Walnut St.
Caylor, Charles H. 303 S. Main St.
Caylor, Harold D. 303 S. Main St.

Caylor, Truman E.....303 S. Main St.
Collins, Jack T.....303 S. Main St.
Cook, Robert G.....303 S. Main St.
Dorrance, Thomas O.....303 S. Main St.
Eisaman, Jack L.....303 S. Main St.
Gitlin, Max M.....121 E. Market St.
Gitlin, William A.....121 E. Market St.
Hamilton, Orville G. (S).....227 S. Main St.
Huffman, Galen C.....303 S. Main St.
Jackson, Charles E.....303 S. Main St.
Kephart, S. Bruce.....303 S. Main St.
Lehman, Emery W.....904 S. Bennett St.
Matzen, Richard N.....303 S. Main St.
Mead, Clarence H. (S).....227 S. Main St.
Meier, Donald W.....303 S. Main St.
Milroy, Robert A.....303 S. Main St.
Panos, Constantine G.....227 S. Main St.
Phillips, John F.....303 S. Main St.
Pietz, David G.....303 S. Main St.
Sorg, David A.....303 S. Main St.
Stevens, Adam C.....303 S. Main St.
Strehler, Don A.....303 S. Main St.
Symon, William E.....303 S. Main St.
Talbert, Pierre C.....303 S. Main St.
Yoder, Richard P.....303 S. Main St.

Gingerick, Charles M.....Liberty Center
Hardin, Wayne E.....Ossian

Rudy, Donald B.
P. B. 636, Salisbury, Southern Rhodesia

WHITE COUNTY

Galbreth, Jesse P. (S).....Burnettsville
Houser, Wayne W.....Monon
McClure, Stanley E.....Monon

Monticello

Beck, David C.....135 S. Illinois St.
Dickerson, W. Martin.....1114 O'Connor Blvd.
Fullerton, Robert L.....201 Beach Dr.
Hibner, Nolan A.....110 S. Main St.
Morris, Warren V.....115 Court St.

Mayfield, Clifford H. (S).....Reynolds
Baynes, Frank L.....Wolcott
Forbes, Violet Crabbe.....Wolcott

WHITLEY COUNTY

Hershey, Ernest A. (S).....Churubusco
Minick, Linus J.....Churubusco

Columbia City

Hamilton, Thomas.....Columbia City
Heritier, C. Jules.....116 S. Chauncey
Langohr, John L.....215 E. Van Buren St.
Lehmberg, Otto F. C.....118 E. Van Buren St.
Niccum, Warren L.....215 E. Van Buren St.
Nolt, Ernest V. (S).....103 N. Line
Reid, Donald B.....118 E. Van Buren
Roth, James R.....R. R. #4
Thompson, Frank M.....510 N. Main St.
Vogel, John L.....215 E. Van Buren St.
Wait, Jerome H.....115 S. Main St.
Wilson, John.....122 N. Main St.

Stalter, Gaylord W.....North Webster
Mishler, Joe B.....P. O. Box 276, Pierceton
Yoder, Dewey D.....R. R. #1, Pierceton

Huffman, Verlin P.....701 State St., South Whitley
Jehanyar, M. Ali..403 E. Columbia, South Whitley

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to the
INDIANA STATE MEDICAL ASSOCIATION

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Boze, Mrs. Robert L.....255 Dearborn St.
Luginbill, Mrs. Howard.....817 W. Main St.

Decatur

Burk, Mrs. James M.....221 S. Third St.
Carroll, Mrs. John C.....R. R. 5
Freeby, Mrs. William C.....1022 Mercer Ave.
Girod, Mrs. Arthur H. R. R. 6
Kohne, Mrs. Gerald J.....304 W. Adams St.
Parrish, Mrs. Richard K.....242 S. 2nd St.
Rich, Mrs. Norval S.....R. R. 4
Terveer, Mrs. John B.....1721 W. Monroe St.
Zwick, Mrs. Harold F.....104 E. Rugg

Cutshaw, Mrs. James A.....Monroeville
Harless, Mrs. Fred O.....Monroeville

ALLEN COUNTY

Bluffton

Brickley, Mrs. Harry D.....227 S. Main St.
Buckner, Mrs. Winifred.....116 E. Walnut
Hamilton, Mrs. O. G.....203 E. Central Dr.
Mead, Mrs. C. H.....211 W. Washington

Fort Wayne

A

Adams, Mrs. E. Wade.....1902 Forest Park Blvd.
Adams, Mrs. John R.....2538 Fairfield Vw. Pl.
Ahlbrand, Mrs. Roland C.....1242 Northlawn
Aiken, Mrs. Arthur F.....8331 Waterswolde Lane
Aiken, Mrs. Nevin E.....5540 Leo Rd.
Anderson, Mrs. Ernest 1908 McKinnie
Arata, Mrs. Justin E.....224 Ludwig Rd.
Ashman, Mrs. William C.....7624 Wohama Dr.
Aust, Mrs. Charles H.....7137 Roseann Parkway

B

Ball, Mrs. John R.....4112 S. Harrison
Baltes, Mrs. Joseph H.....1309 Sunset Dr.
Barch, Mrs. John W.....1715 Poinsette Dr.
Bash, Mrs. Wallace E.....1201 Korte Lane
Beams, Mrs. Ralph.....3710 Wawonaissa
Beierlein, Mrs. Karl M.....2716 Butler Road
Bergendahl, Mrs. Emil.....1202 Illsey
Berghoff, Mrs. J. R.....3736 Plymouth
Berghoff, Mrs. Raymond.....4124 Cadena
Beutler, Mrs. Theodore....3505 S. Washington Rd.
Billingsley, Mrs. John.....4720 Crestwood
Blichert, Mrs. Peter A.....449 W. Sherwood
Bolman, Mrs. R. Morton.....Hamilton Rd.
Borders, Mrs. Theodore R.....1802 Nevada St.

Bossard, Mrs. John W. 1712 California
Brandt, Mrs. William 3535 Kirkland
Braunlin, Mrs. Robert J. 3420 Kirkwood Dr.
Bridges, Mrs. W. Lloyd 207 Southridge Rd.
Bromley, Mrs. Luman W. 410 W. Sherwood Tr.
Brosius, Mrs. Robert H. 3302 Garland
Brown, Mrs. Frederic W. 1813 Wood Moor
Brucker, Mrs. Perry A. 4705 Hiawatha
Brueggeman, Mrs. Henry O. .. 1202 W. Washington
Bryan, Mrs. Franklin A. 3006 Devon
Buckner, Mrs. Doster Bass Rd., R. R. 5
Buckner, Mrs. George D. 4327 Hampshire Drive
Burkhart, Mrs. Charles A. 7621 Pinedale Dr.

C

Carlo, Mrs. Ernest 5205 Indiana
Cartwright, Mrs. E. L. 3718 Hiawatha Blvd.
Chambers, Mrs. Alan 4135 S. Harrison
Chase, Mrs. James A. 4120 N. Washington Rd.
Clark, Mrs. Wm. R. 4002 S. Harrison
Cochran, Mrs. Harry A., Jr. .. 420 W. Sherwood Tr.
Connelly, Mrs. Richard 3016 Kingsley
Cooney, Mrs. Charles J. 1168 Westover Rd.
Cottrell, Mrs. Robert F. 5125 Worthman Ct.
Craig, Mrs. Richard 5435 Woodhurst Blvd.
Culp, Mrs. John E. 2505 Paulding Rd.

D

Dahling, Mrs. Fred W. 1229 Rose Ave.
Datzman, Mrs. Richard 5402 Bluffton Rd.
Dunstone, Mrs. H. Carter 2525 Paulding Road

E

Eberly, Mrs. Karl C. 1240 W. Rudisill
Emenhiser, Mrs. John L. 1411 Reed Road
Engleman, Mrs. Reinhold 3629 Chancellor Dr.

F

Farquhar, Mrs. John S. 2503 Drexel
Ferguson, Mrs. Arthur N. 328 W. Sherwood
Flaherty, Mrs. Robert 1835 Forest Park Blvd.
Frankhouser, Mrs. Chas. M. .. 7245 Winchester Rd.
Fullam, Mrs. Richard 4159 Woodstock

G

Garton, Mrs. Harry W. R. R. 6, Hamilton Rd.
Gastineau, Mrs. David C. 8203 Westridge Rd.
Gentile, Mrs. Paul 6821 Woodcrest Dr.
Gerding, Mrs. William J. 1721 Forest Park Blvd.
Glassley, Mrs. Stephan 6950 Stellhorn Rd.
Glock, Mrs. Wayne R. Tonkel Road
Goebel, Mrs. Carl W. 4102 So. Harrison
Graham, Mrs. George M. 1126 W. Rudisill
Greenlee, Mrs. Robert L. 3344 Sanibel Dr.
Griest, Mrs. Walter D. 4809 Arlington
Griffith, Mrs. Harold R. 1913 Forest Park Blvd.

H

Hackett, Mrs. Walter G. 5220 Crandon Lane
Haffner, Mrs. Herman G. 3606 Mulberry Rd.
Haley, Mrs. Alvin J. 3720 Stellhorn Rd.
Hall, Mrs. William R. 1247 Maxine
Haller, Mrs. Richard C. 6333 Bayberry Dr.
Hamilton, Mrs. Emory D. 2405 Florida Dr.
Hamilton, Mrs. George 2725 N. Anthony Blvd.
Harvey, Mrs. Harry C. 2228 Crescent
Hasewinkle, Mrs. August M. .. 3544 Kirkland Lane
Hastings, Mrs. Warren C. 1822 Kensington Rd.
Hattendorf, Mrs. A. Paul 4041 Old Mill Rd.
Havens, Mrs. Russell E. 1845 Kensington
Hershberger, Mrs. Philip G. .. 5525 Covington Rd.
Hickman, Mrs. Donald M. 1815 Kensington Rd.
Hillery, Mrs. Robert 6430 Bittersweet Dr.
Hipskind, Mrs. Richard E. 1416 Wood Moor
Hoffman, Mrs. Arthur F. 3619 Harris Rd.
Holsinger, Mrs. Robert E. 4617 Indiana
Howe, Mrs. Fordyce L. 2540 Springfield
Humphreys, Mrs. John L. .. 3701 S. Washington Rd.

I & J

Irmscher, Mrs. Geo. W. 2024 Florida Dr.
Isenogle, Mrs. Kenneth 6016 Allendale Ct.
Jackson, Mrs. John F. 4922 Indiana
Johnston, Mrs. R. M. 2537 Bellview Dr.
Jontz, Mrs. Joseph 514 Shadyhurst Dr.
Jontz, Mrs. Richard L. 3705 Marigold
Juergens, Mrs. Richard 6825 Ludwig Circle

K

Karol, Mrs. Herbert J. 1725 Ardmore
Keck, Mrs. Carleton A. 4633 Crestwood
Kent, Mrs. Richard N. 2717 East Dr.
Kidder, Mrs. Orva T. Lima Rd.
Kilgore, Mrs. Byron 2804 Trent Dr.
Kimbrough, Mrs. Robert 4601 Beaver Ave.
Kleifgen, Mrs. Wm. A. 4602 Tacoma
Kleopfer, Mrs. Ronald G. 3411 Eastwood Dr.
Klooze, Mrs. Kenneth W. 723 W. Packard
Knight, Mrs. Lewis W. 3502 Glencairn Dr.
Krueger, Mrs. John 4418 Bradwood Terrace
Kruse, Mrs. Walter E. 4006 Spanish Trail

L

Ladig, Mrs. Donald S. 2720 Fairfield
Laker, Mrs. Gene 4921 Tacoma
Laker, Mrs. Richard 4750 Holton
Lampe, Mrs. Elfred H. 1018 Kinnaird
Land, Mrs. Francis L. 4129 S. Harrison Blvd.
Laycock, Mrs. Richard 5019 Stellhorn Rd.
Lenk, Mrs. George G. E. State St. Ext. 5507
Lloyd, Mrs. Robert P. 4111 Victoria
Logan, Mrs. Richard S. 3629 Hastings Rd.
Lohman, Mrs. Robert M. 1320 Westover Rd.
Lorman, Mrs. James G. 3401 Kirkwood
Loudermilk, Mrs. Jack L. 3032 Glencairn
Lyon, Mrs. William C. 4918 Northcrest Dr.

M

McArdle, Mrs. Edward G. ... 1133 W. Rudisill Blvd.
McBride, Mrs. W. O. 610 Beechwood Circle
McCallister, Mrs. John W. 4215 Drury Lane
McCoy, Mrs. Roy R. 4101 S. Harrison
McDowell, Mrs. George A. .. 2322 Forest Park Blvd.
McEachern, Mrs. Cecil 4242 Old Mill Rd.
McKeeman, Mrs. Donald H. 1616 Ardmore
Manning, Mrs. George 4115 Indiana Ave.
Marshall, Mrs. Caesar L. 1215 McCulloch
Mastrangelo, Mrs. Michael J. . 2718 Priscilla Lane
Mensch, Mrs. James R. 2120 Forest Park Blvd.
Mercer, Mrs. S. R. 3235 W. Washington
Meyer, Mrs. Theo. O. 3728 Kirkwood
Michaelis, Mrs. Steven C. 1255 Korte Lane
Miller, Mrs. Carl G. 457 Oakdale Dr.
Miller, Mrs. Don E. 5511 Plaza Dr.
Miller, Mrs. Edward D. 2615 East Drive
Miller, Mrs. H. Paul 6408 S. Calhoun
Miller, Mrs. Mahlon F. 1115 Illsley Dr.
Miller, Mrs. Orval J. 1810 Kensington
Miller, Mrs. Richard 5125 Old Mill Road
Miller, Mrs. Wm. J. 2620 Capitol
Moats, Mrs. Carl F. 3210 N. Washington Rd.
Moeller, Mrs. Victor C. 4723 St. Joe Center Rd.
Morgan, Mrs. Milton M. 1147 S. Lafayette
Moravec, Mrs. Arthur 4711 Old Mill Rd.
Morey, Mrs. Edwin 709 Kinnaird
Mortenson, Mrs. Leland J. . 1310 N. Foster Pkwy.
Mueller, Mrs. Lawrence W., 3423 S. Washington Rd.
Murdock, Mrs. Harvey L. 1212 Kensington

N-O

Nahrwold, Mrs. E. W. 2325 Inwood Dr.
Nill, Mrs. John H. 5316 South Wayne
Nolan, Mrs. Gerald R. 1102 Kensington
O'Brian, Mrs. John F. 1215 N. Anthony Blvd.
O'Rourke, Mrs. Carroll Covington Road
Oyer, Mrs. J. Harold 2206 Wawonaissa

P

Painter, Mrs. Donald S.... R. R. 1, Southridge Rd.
Parker, Mrs. C. B. 2215 Paulding Rd.
Patterson, Mrs. Jack W. 8914 Maravilla Dr.
Parrot, Mrs. Donald J. 1809 Kensington
Perrin, Mrs. Kermit F. 2828 Lake Ave.
Phelps, Mrs. William J. 4136 Cadena Lane
Pickett, Mrs. Merle E. 4509 Trierwood
Ponczek, Mrs. Edward J. 939 Lincoln
Popp, Mrs. Milton F. 3148 Parnell Ave.
Powell, Mrs. M. Jack 7412 Ridgeknoll Rd.
Priddy, Mrs. Marvin 3902 Bonita Place

R

Rank, Mrs. William B.... 3737 S. Washington Rd.
Reed, Mrs. John D. 2015½ Boyer Ave.
Rhamy, Mrs. Bonnelle W. 4312 Beaver
Rissing, Mrs. Walter J. 3200 Irvington
Roser, Mrs. Arthur J. 5576 Covington
Rossiter, Mrs. Dudley L. 724 Oakdale Dr.
Rothberg, Mrs. Maurice 4319 Hartman Rd.
Rousseau, Mrs. John W. 3018 Devon

S

Sahlmann, Mrs. Hans 2042 Woodward
Salon, Mrs. Harry W. 4017 Hiawatha Blvd.
Salon, Mrs. Joel 4935 Old Mill Road
Salon, Mrs. Nathan L. 7939 Scottwood Court
Sarver, Mrs. Francis E. 4629 Tacoma
Savage, Mrs. Arthur R.... S. Ridge Road, R. R. 1
Schlademan, Mrs. Karl R. 5231 Old Mill Rd.
Schloss, Mrs. Robert 416 Sherwood Terrace
Schmidt, Mrs. Eugene E. 1119 Maxine Dr.
Schmoll, Mrs. Robert J. 5214 Woodhurst
Schneider, Mrs. Louis A.... 1351 W. Sherwood Tr.
Schoen, Mrs. Fred 5128 S. Wayne
Scoins, Mrs. W. H. 4301 Taylor
Senseny, Mrs. Eugene F. 3112 Beaver
Shaw, Mrs. James E. 3932 Rosewood Drive
Shinabery, Mrs. Lawrence 1850 Broadway
Shugart, Mrs. Robert R... 4206 N. Washington Rd.
Sidell, Mrs. James 1128 Powers
Singer, Mrs. Elmer C. 3121 E. Maple Grove
Smith, Mrs. G. A. 2313 Florida
Smith, Mrs. Philip L. 5416 South Wayne
Smith, Mrs. Richard B. 4902 Stretford Rd.
Snyderman, Mrs. Sanford C.... 3222 N. Wash. Rd.
Somers, Mrs. G. H. 1253 W. Rudisill
Spencer, Mrs. C. Herbert 2106 Paulding Road
Stanley, Mrs. Robert G. 411 W. Concord Lane
Stauffer, Mrs. Richard C. 3924 Spanish Trail
Steigmeyer, Mrs. David J. 6809 Woodcrest
Stellner, Mrs. Howard A. 3323 Butler Court
Stier, Mrs. Paul 13120 Ravine Trail, R. R. 6
Stucky, Mrs. Jerry L. 4167 Woodstock Ave.
Sullivan, Mrs. Robert E. 4145 Woodstock

T

Tennant, Mrs. David L. 3908 Spanish Trail
Terrill, Mrs. Richard 4727 Old Mill Rd.
Thornton, Mrs. Walter E. 601 Oakdale Dr.
Tomusk, Mrs. August N. 2315 Springfield
Trier, Mrs. Herbert P. 3212 River Forest Dr.

U-V

Ungemach, Mrs. Willo F. 3929 Wenonah

W

Wade, Mrs. Reynolds W., Jr.... 4105 Dalewood Dr.
Walker, Mrs. Floyd 1202 Forest Ave.
Wallace, Mrs. Collins 4188 Bueshing
Warfield, Mrs. Chester H. 3924 Harris Rd.
Weber, Mrs. John R. 1215 Sheridan Ct.
Wick, Mrs. Alfred A. 2320 Springfield Ave.
Wilkins, Mrs. Robert W. 914 Prange Dr.
Williams, Mrs. Berniece 2601 Trier Rd.
Wilson, Mrs. Leslie 2810 S. Wayne Ave.
Wilson, Mrs. Roland B. 4100 Abbott
Wright, Mrs. William C. 1834 Pemberton Dr.

Z

Zehr, Mrs. Noah 301 W. Creighton
Zweig, Mrs. Elmer S. 2015 Pemberton

New Haven

Dahling, Mrs. C. Wallace.. Carefree Farms, R. R. 2
Emenhiser, Mrs. Don C.... 1040 Lincoln Highway
Hoetzer, Mrs. Eldore M. Doyle Rd.
Stumpf, Mrs. Edwin E. R. R. 2, Werling Rd.

Emme, Mrs. Richard W. R. R. 2, Grabill
Mackel, Mrs. Frederick R. R. 1, Huntertown
Harless, Mrs. O. Fred Monroeville
Schlegel, Mrs. Edward
2009 Frieze Ave., Ann Arbor, Mich.
Green, Mrs. Robert F. Defiance, Ohio

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Columbus

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Adler, Mrs. David L. 4224 Riverside Dr.
Andrews, Mrs. Fred B. 2813 DeSoto Way
Beggs, Mrs. Lowell F. 2733 Riverside Dr.
Daugherty, Mrs. Forest 2813 31st St.
Davis, Mrs. Marvin R.... 2300 N. Washington St.
Dugan, Mrs. Thomas 2651 18th St.
Echsner, Mrs. Herman J. 300 Tipton Lane
Fisher, Mrs. Walter S. 906 Franklin St.
Fuller, Mrs. Robert 1602 Crescent Dr.
Gammell, Mrs. Lindley L. 602 22nd St.
Hart, Mrs. Robert B. 1203 16th St.
Hauersperger, Mrs. Alfred D. 4164 River Rd.
Hawes, Mrs. Marvin E. 2975 Franklin Dr.
Henry, Mrs. Alvin L. 1926 Lafayette Avenue
Jacobs, Mrs. E. Robert 2335 Riverside Dr.
Knotts, Mrs. Halleck S. 2740 Washington St.
Krueger, Mrs. Robert B. 2102 Lafayette Ave.
Macy, Mrs. George W. 2632 Riverside Dr.
Marr, Mrs. Griffith Marr Rd., R. R. 1
McCullough, Mrs. Henry G.
Old Indianapolis Rd., R. R. 4
Mohler, Mrs. Floyd W. 308 Sunset Dr.
Norton, Mrs. Harold J. 909 Pearl St.
O'Bryan, Mrs. Richard B.... 3306 Grove Parkway
Overshiner, Mrs. Lyman 1715 Franklin St.
Ranck, Mrs. Benjamin A.... 3370 Grove Parkway
Rau, Mrs. Charles A. 1312 Audubon Dr.
Reid, Mrs. Robert 2712 Lafayette Avenue
Richmond, Mrs. Harold W. 2971 Tulip Dr.
Ryan, Mrs. Wm. J. 3224 Grove Parkway
Schmitt, Mrs. Richard K. 2639 Riverside Dr.
Sigmund, Mrs. Wm. B. Davis Road
Snapp, Mrs. Richard A. 2644 Chestnut St.
Weinland, Mrs. George C. R.R. 5
Wickstrom, Mrs. Otto W. 205 Newsom
Williams, Mrs. E. K. 3020 N. Washington St.
Williams, Mrs. E. W. 1902 Franklin St.
Yadon, Mrs. Raymond E. 206 Newsom St.
Zaring, Mrs. Byron K. 2419 Riverside Dr.

Schneider, Mrs. Kenneth Nashville
Seibel, Mrs. Robert M. Nashville

BENTON COUNTY

Leak, Mrs. Robert Boswell
Turley, Mrs. Verne L. 1003 E. 5th St., Fowler
McKinney, Mrs. Donald L. Box 448, Otterbein
Scheurich, Mrs. Virgil.. State Rd. 55 South, Oxford

BOONE COUNTY

Lebanon

Boyer, Mrs. Don 129 W. Camp
Coons, Mrs. John D. 121 Ulen Blvd.
Coons, Mrs. Ritchie 138 Ulen Blvd.
Honan, Mrs. Paul 202 East Dr.
Kern, Mrs. Clarence G. 1019 N. Meridian
Lenox, Mrs. Jack 203 East Dr.
Weddle, Mrs. Charles O. 1210 N. East
Wiseheart, Mrs. Robert H. 123 Ulen Blvd. Dr.

Schaaf, Mrs. Alvin D. Jamestown
Gregg, Mrs. Edwin 320 E. Main, Thorntown
Harvey, Mrs. Ralph Zionsville
Lovett, Mrs. Harvey D. R. R., Zionsville

CARROLL COUNTY

Delphi

Baker, Mrs. Eldon E. 204 W. Summit St.
Crampton, Mrs. Chas. C. 218 East Monroe
Maggart, Mrs. Ralph R.R. 3
Petry, Mrs. T. Neal 211 W. North
Seese, Mrs. Robert M. 201 W. North St.
Wagoner, Mrs. Geo. W. 305 W. Summit St.

Adams, Mrs. Max R. Park Row, Flora
McLaughlin, Mrs. James R. 511 E. Main, Flora

CASS COUNTY

Dutchess, Mrs. Charles T. Galveston

Logansport

Adamski, Mrs. M. S. 614 17th
Bailey, Mrs. Earl W. 2522 North
Ballard, Mrs. Charles A. R. R. 4, Ballard Rd.
Bean, Mrs. Joseph S. R. R. 1
Burnett, Mrs. Paul C. Logansport State Hosp.
Cobb, Mrs. Clarence M. R. R. 4, Box 8
Davis, Mrs. John C. 2119 North
Eckert, Mrs. Russell A. R. R. 1
Fitzgerald, Mrs. Brice 1930 High
Fogel, Mrs. Ernest J. Logansport St. Hospital
Gatzimos, Mrs. Christos D. 3116 High St. Rd.
Glendening, Mrs. Richard L. 2300 Broadway
Hall, Mrs. Bernard R. 3100 E. Broadway
Harrington, Mrs. James F. 2316 Rolling Ridge
Hedde, Mrs. Eugene L. 2304 Chase Rd.
Hillis, Mrs. L. J. 2410 Hastye Hyll
Horning, Mrs. Richard R. Logansport St. Hosp.
Jones, Mrs. J. Carl R. R. 3
King, Mrs. Jay M. 2319 May Fair Dr.
Maschmeyer, Mrs. R. H. Logansport St. Hospital
Morrical, Mrs. Russell J. 415 Highland
TerBush, Mrs. Edward L. R. R. 5
Viney, Mrs. Charles L. 26th and High St.
Wilson, Mrs. Paul H. 2600 Hastye Hyll
Winter, Mrs. Donald K. 2409 Hastye Hyll

Flanagan, Mrs. E. P. 106 May, Walton
Lybrook, Mrs. Daniel E. Young America

CLARK COUNTY

Charlestown

Goodman, Mrs. Eli 333 Oriole Dr.
Jones, Mrs. David State Road 39

Clarksville

Mudd, Mrs. Joseph 103 W. Rosewood Dr.
Willner, Mrs. Alan 214 Rosewood Dr.
Wolverton, Mrs. George 115 Rosewood Dr.

Jeffersonville

Bizer, Mrs. Mier 119 Forrest Dr.
Buckley, Mrs. Ernest 14 Blanchel Terrace
Buehler, Mrs. George Route 1, Utica Pike
Carlberg, Mrs. Dale L. 2 Blanchel Terrace
Carney, Mrs. J. T. 2602 Hollywood Dr.
Dare, Mrs. Lee 215 Sparks Ave.
Graham, Mrs. O. P. 713 E. Maple St.
Havens, Mrs. Alfred Lyle Uttica Pike
Havens, Mrs. Thomas R. 400 Chippewa
Huoni, Mrs. John 6 Blanchel Terrace Dr.
Isler, Mrs. Nathaniel C. 901 Morningside Dr.
McKechnie, Mrs. Robert K. Blackiston Mill Rd.
Oca, Mrs. Clemente F. 1452 Altawood Dr.
Reed, Mrs. Edsel 4 Pawnee Dr.
Roby, Mrs. A. L. 2708 Hollywood Dr.
Shaw, Mrs. Houston 209 Maplewood Dr.

Sellersburg

Meyer, Mrs. Claude J. 225 W. Utica St.
Regan, Mrs. George 303 Indiana
Sturgis, Mrs. Donald G. 542 Linnwood

Carr, Mrs. Joseph Pine Rd., Henryville
Greene, Mrs. W. R. Henryville

DEARBORN-OHIO COUNTIES

Aurora

Baker, Mrs. Leslie M. 204 Fifth
Frable, Mrs. Frank 412 Sunnyside Ave.
Jackson, Mrs. Kenneth 221 Mechanic St.
Lindgren, Mrs. Ivan Cobbs Hill
Olcott, Mrs. Charles W. 305 Sunnyside
Turner, Mrs. David 422 Sunnyside Ave.

McNeely, Mrs. Matthew J. Dillsboro
Fessler, Mrs. Gordon Rising Sun

Lawrenceburg

Conrad, Mrs. Henry 370 Bielby Rd.
Fagaly, Mrs. William J. 57 Oakley
Houston, Mrs. Fred D. 533 Ludlow St.
Hunter, Mrs. Lowell 370 Bielby Rd.
Morrison, Mrs. George 107 Billups
Pfeifer, Mrs. James M. 550 Ludlow
Rhodes, Mrs. A. Keith 370 Bielby Rd.
Streck, Mrs. Francis A. 547 Ridge Ave.
Weisenberger, Mrs. Brockton L. 912 Ridge Dr.

DECATUR COUNTY

Greensburg

Acher, Mrs. Robert P. 446 E. Washington
Callaghan, Mrs. W. C. 403 Barachel Lane
Dickson, Mrs. Dale D. 700 N. East St.
Miller, Mrs. James C. 178 N. Michigan Ave.
Morrison, Mrs. J. Trevor 161 N. Michigan Ave.
Overpeck, Mrs. Charles R. R. 8
Shaffer, Mrs. William R. 214 N. Franklin
Walker, Mrs. Louis A. R. R. 5

Porter, Mrs. Edward Westport

DELAWARE-BLACKFORD COUNTIES

Hurley, Mrs. John Daleville
Puterbaugh, Mrs. Karl Albany
Montgomery, Mrs. Lall G.
Box 149A, RFD 1, Gaston
Advincula, Mrs. Luis 401 E. Harris, Eaton

Muncie

A

Adams, Mrs. William B.....W. Jackson St. Pike
Alvey, Mrs. Charles R.....515 Greenbriar Rd.
Anthony, Mrs. Harvey M.....822 W. Charles

B

Ball, Mrs. Clay A.....1015 Linden Ave.
Ball, Mrs. Philip.....2820 W. Main St.
Benken, Mrs. Lawrence.....1511 Riley Rd.
Bergwall, Mrs. Warren 1507 Riley Rd.
Bibler, Mrs. Henry.....2625 Parkway Dr.
Botkin, Mrs. Clyde G.....2904 Riverside Ave.
Botkin, Mrs. Thomas.....2500 Bethel Pike
Brown, Mrs. Leland.....605 Waid Ave.
Brown, Mrs. Stewart D.....R. R. 3, Hamilton Pk.
Brown, Mrs. Thomas.....Isanogel Road
Burwell, Mrs. Stanley W.....3124 Gilbert
Butterfield, Mrs. Robert.....222 Winthrop Rd.
Butz, Mrs. Ralph O.....3824 Riverside Ave.

C

Chun, Mrs. Wallace.....912 Surry Dr.
Clark, Mrs. Robert.....911 University Ave.
Clauser, Mrs. Eldo H.....815 Wayne
Clevenger, Mrs. Joseph H.....3124 University Ave.
Cochran, Mrs. Robert.....1 Briar Rd.
Cooper, Mrs. John F.....1700 Winthrop Dr.
Covalt, Mrs. Wendell E.....120 Berwyn Rd.
Cullison, Mrs. John.....2601 Parkway Dr.
Cure, Mrs. Elmer T.....913 University Ave.

D

David, Mrs. George.....1501 Wheeling Ave.
Deutsch, Mrs. William.....3305 Riverside Ave.
Dunning, Mrs. Thomas.....3 Briar Rd.

E-F

G

Garling, Mrs. L. C.....37 Briar Rd.
Geckler, Mrs. Charles E.....1007 W. North St.
Gibson, Mrs. Robert.....306 Taft Rd.
Gill, Mrs. Tom.....45 Warwick Rd.
Greiber, Mrs. Marvin.....310 Riley Rd.
Gustafson, Mrs. Milton H.....230 Stradling Rd.

H-I

Hall, Mrs. Robert S.....701 Brentwood
Hayes, Mrs. T. R.....19 Warwick Road
Henderson, Mrs. Ramon.....75 Warwick Rd.
High, Mrs. Ralph.....2825 University Ave.
Holmes, Mrs. John.....908 W. Gilbert
Hostetter, Mrs. I. S.....300 Winthrop Rd.
Imhof, Mrs. J. D.....46 Warwick Rd.

K-L

Kalker, Mrs. Morton.....3330 Godman
Kammer, Mrs. Walter F.....1005 W. Parkway Dr.
Kim, Mrs. Joon.....1308 Riley Rd.
Kirshman, Mrs. Forrest E.....41 Briar Rd.
Ko, Mrs. Richard.....R. R. 7
Koch, Mrs. Edwin 2904 Ashland Ave.
Koss, Mrs. K. William.....1504 Riley Rd.
Lowry, Mrs. Donald.....1218 Alden Rd.

M-N

Mathewson, Mrs. R. C.....R. R. 6
McClintock, Mrs. James A...3121 University Ave.
McCoy, Mrs. George.....1605 Winthrop
McDowell, Mrs. Fletcher W.....1721 N. Tillotson
Moore, Mrs. Jack.....2005 W. Purdue
Moore, Mrs. Tom C.....1011 E. Parkway Dr.
Morris, Mrs. J. W.....222 Stradling Rd.
Moss, Mrs. M. J.....1010 W. Parkway Dr.
Nelson, Mrs. Harold E.....3216 Torquay Rd.

O

Owens, Mrs. Richard R.....3011 Oaklyn Ave.
Owens, Mrs. Thomas.....608 E. Charles

P-Q

Peacock, Mrs. Robert.....R. R. 3
Pippinger, Mrs. Joseph 23 Burnell
Pippinger, Mrs. W. G.....1200 N. Tillotson
Quick, Mrs. Wm. Moore Rd.

R

Rettig, Mrs. Arthur.....614 N. McKinley Ave.
Rivers, Mrs. Glynn.....307 Alden Rd.

S

Schoenhals, Mrs. Charles.....1503 Riley Rd.
Schulhof, Mrs. M. G.....921 W. Parkway Dr.
Smith, Mrs. J. S.....1006 E. First St.
Speck, Mrs. Carlson.....1205 Brentwood
Steele, Mrs. Frank M.....421 Bittersweet
Stibbins, Mrs. Warren E.....609 Brentwood
Stout, Mrs. Francis E.....102 Berwyn Rd.
Stump, Mrs. Richard.....1304 Bethel

T

Taylor, Mrs. Donald.....8 Wildwood Lane
Taylor, Mrs. James A.....1613 Riley Rd.
Tharp, Mrs. Donald.....3121 Petty Rd.
Tomlin, Mrs. Hugh M.....2920 Beechwood Ave.

V-W

Voss, Mrs. Gert.....2512 Petty Rd.
Walker, Mrs. Jack.....R. R. 6, Box 385A
Ware, Mrs. Herbert 1700 Glen Ellyn

Y

Young, Mrs. G. S.....114 Berwyn Rd.

Hinchman, Mrs. Jean Parker
Hill, Mrs. Robert Yorktown
Moore, Mrs. Will C...White Oak Farm, Yorktown
Rutledge, Mrs. Jean.....R. R. #1, Yorktown

DUBOIS COUNTY

Barrow, Mrs. John H.....Dale, P. O. Box 128
Backer, Mrs. Henry George..Ohio St., Ferdinand
Bland, Mrs. Jack D.....Holland

Huntingburg

Amini, Mrs. Sohrab.....R. F. D. #2
Bretz, Mrs. John.....Orchard Road
Craig, Mrs. Harry.....5th St.
Scales, Mrs. Alfred B.....Holland Rd.
Scales, Mrs. Allen D.....Cedar Heights
Stork, Mrs. Harvey K.....523 First St.

Jasper

Beaven, Mrs. John.....W. 13th St.
Benages, Mrs. Anthony 948 MacArthur
Gootee, Mrs. Francis.....Jasper
Gootee, Mrs. Thomas.....1328 Dorbett St.
Heck, Mrs. Martin C.....408 W. 15th
Held, Mrs. George A.....716 W. Ninth
Klamer, Mrs. Charles H.....616 W. 13th St.
Ploetner, Mrs. Edward.....1344 Dorbett St.
Salb, Mrs. J. P.....R. R. #5
Wagner, Mrs. Arthur L.....825 W. 13th

ELKHART COUNTY

Bristol

Neidballa, Mrs. E. G. R. R. 1
Patrick, Mrs. Glenn P. R. F. D. 1
Quilty, Mrs. Thomas James R. R. 1
Schlosser, Mrs. H. C.
Seven Gables, W. Vistula St., Box 57

Elkhart

Atwood, Mrs. Wm. H., Jr. 520 Cedar St.
Bender, Mrs. Robert L. 300 Robair Lane
Benson, Mrs. James E. 1501 Fulton St.
Billings, Mrs. Elmer R. 2022 E. Jackson Blvd.
Bloom, Mrs. George R. 1100 E. Jackson Blvd.
Boling, Mrs. Richard C. 217 Riverdale Dr.
Bowdoin, Mrs. George E. 3809 Greenleaf Blvd.
Campbell, Mrs. Patrick B. 1618 Cone St.
Classen, Mrs. Pete R. C. 635 W. Wolf Ave.
Compton, Mrs. Walter A. 2225 Greenleaf Blvd.
Conklin, Mrs. Raymond L. 215 Swanson Circle W.
Cormican, Mrs. Herbert L.
1950 Rainbow Bend Blvd.
Dovey, Mrs. Edward G., Jr. 1430 Ervin St.
Echeverria, Mrs. Rodolfo E. 707 Hiawatha Dr.
Elliott, Mrs. Thomas A. 2001 Stevens Ave.
Finfrock, Mrs. James D. 608 South West Blvd.
Fleming, Mrs. Claude F. 229 W. Jackson Blvd.
Futterknecht, Mrs. James O. 2313 Morehouse Ave.
Gattman, Mrs. G. Beach 1319 Lawn Ave.
Hannah, Mrs. Jack W. 1906 E. Jackson Blvd.
Heminway, Mrs. Norman L.
1700 Rainbow Bend Blvd.
Horswell, Mrs. R. G. 1629 E. Jackson Blvd.
Hull, Mrs. Arthur W. 3333 Greenleaf Blvd.
Hurley, Mrs. James William 1705 Roys Ave.
Ivy, Mrs. John H. 1311 Kilbourn St.
Jones, Mrs. Robert B. 1833 Rainbow Bend Blvd.
Keating, Mrs. John U. 1416 Strong Ave.
Kesim, Mrs. Mufit Husam 812 Hiawatha Dr.
Kielton, Mrs. Melvyn 2509 Pleasant Plain
Kintner, Mrs. Burton E. 3520 E. Jackson Blvd.
Kistner, Mrs. Arthur W. R. F. D. 3, Box 81
Klassen, Mrs. Otto Dyck R. R. 4, Box 504
Koehler, Mrs. Elmer George 615 N. Riverside Dr.
Krause, Mrs. Friedrich 1001 St. Clair St.
Luther, Mrs. William C. 1422 Kilbourn St.
Lundt, Mrs. Milo O. 519 S. Second St.
Mark, Mrs. George Arthur 903 W. Franklin St.
Markel, Mrs. Ivan J. 215 W. Franklin St.
Martin, Mrs. Floyd S. 2301 S. Main St
Martin, Mrs. Paul H. 1519 Strong Ave.
McArt, Mrs. Bruce A. 905 Strong Ave.
Mendez, Mrs. Carlos 1109 Baker Dr.
Miller, Mrs. Galen R. 2229 Thorndale Ct.
Miller, Mrs. Hugh A., Jr. 417 Prospect St.
Miller, Mrs. Samuel T. 174 Witmer Ave.
Mininger, Mrs. Edward P. 1118 E. Jackson Blvd.
Mishkin, Mrs. Irving 1809 Rainbow Bend Blvd.
Paff, Mrs. Wm. A. 1745 Rainbow Bend Blvd.
Paine, Mrs. George E. 329 Meisner Ave.
Pancost, Mrs. Vernon K. 160 Riverview Ave.
Parshall, Mrs. Dale B. 3538 Gordon Rd.
Rouen, Mrs. Robert L. 2002 E. Jackson Blvd.
Rupe, Mrs. Lloyd O. R. R. 4, Oakland Ave. Rd.
Sobol, Mrs. Zbigniew W. 433 East Blvd.
Spray, Mrs. Page E. 658 Kilbourn St.
Stubbins, Mrs. William 15 St. Joseph Manor
Swihart, Mrs. Danny D. 1219 Greenleaf Blvd.
Swihart, Mrs. Homer R. 1621 E. Jackson Blvd.
Swihart, Mrs. Leonard F. 3213 Calumet Ave.
Wilson, Mrs. Orley E. 2505 Greenleaf Blvd.
Work, Mrs. James A., Jr. 4 St. Joseph Manor
Yoder, Mrs. C. Richard 409 Prospect St.
Zeitler, Mrs. Philip S. 1509 Meadow Lane

Goshen

Bender, Mrs. John M. 1303 E. Douglas St.
Bowser, Mrs. Philip G. 707 S. 7th St.
Chandler, Mrs. Leon H. 412 S. Fifth St.
Freeman, Mrs. Floyd M. 309 E. Washington St.
Gorham, Mrs. Charles E. 2105 College Ave.
Graber, Mrs. Virgil R. R. R. 2, Box 107
Harris, Mrs. Neil Revere 628 S. Fifth St.
Hostetler, Mrs. Carl M. 1602 S. Eighth St.
Kennedy, Mrs. Myron S. 1503 West Ave.
Krabill, Mrs. Willard S. 120 Carter Ave.
Massanari, Mrs. Walter S. 2613 Martin Manor Dr.
Nelson, Mrs. D. Chester 1210 S. Eighth St.
Quilty, Mrs. Thomas J. 801 S. 7th St.
Smucker, Mrs. Ernest E. R. R. 5, Bluff Rd.
Troyer, Mrs. Dana O. 1727 South 13th St.
Troyer, Mrs. George W. 1204 S. 8th St.
Turner, Mrs. John P. 507 Greene Road
Vander Bogart, Mrs. Harry E. 1411 S. Eighth St.
Wagner, Mrs. David G. 307 S. Seventh St.
Westfall, Mrs. George S. 2422 S. Main St.
Yoder, Mrs. Albert C. 816 S. Sixth St.

Nappanee

Kendall, Mrs. F. M. 654 Woodland
Price, Mrs. Douglas W. 607 E. Van Buren
Slabaugh, Mrs. Jancy S. 258 N. Main St.

Clark, Mrs. Jack P.
136 N. Shore Dr., R. R. 4, Syracuse
DeFries, Mrs. John J. New Paris
Fosbrink, Mrs. E. L. 218 S. Huntington, Box 157, Syracuse
Ganser, Mrs. Ralph V. 1035 Lincolnway East, Mishawaka
Miller, Mrs. Donald G. 105 Brown St., Middlebury
Zimmerman, Mrs. William H.
R. R. 2, Syracuse, Box 31

Wakarusa

Abel, Mrs. Robert 105 E. Harrison
Guttman, Mrs. John B. 201 N. Elkhart Ave.
Miller, Mrs. James Ralph
106 Wabash Ave., Box 421

FAYETTE-FRANKLIN COUNTIES

Brookville

Foreman, Mrs. Walter A. 617 Main
Seal, Mrs. Perry F. 901 Main
Smith, Mrs. H. N. 812 Main

Connersville

Ashworth, Mrs. Louis Neff 2027 Indiana Ave.
Brookman, Mrs. Robert E. 2750 Grand Ave.
Clark, Mrs. Helen Nevin 401 Western Ave.
Ellis, Mrs. George M. 108 East 10th St.
Gregg, Mrs. Albert F. 835 Lincoln Ave.
Hudson, Mrs. Arlington M. 80 East Drive
Kauffman, Mrs. Robert W. R. F. D. 2
Lockhart, Mrs. Jack M. 54 West Drive
Mountain, Mrs. Francis B. 1720 Virginia Ave.
Neukamp, Mrs. Frank H. 1810 Virginia Ave.
Sanders, Mrs. Bertram W. 1533 Virginia Ave.
Steinem, Mrs. Joseph L. R. F. D. #3
Watterson, Mrs. Gerald T. 1704 Virginia Ave.

Poston, Mrs. C. L. R. R. 2, Laurel

FLOYD COUNTY

Jeffersonville

Baxter, Mrs. S. M. 3100 Centralia Ct.
Gentile, Mrs. John P. 3405 Centralia Ct.
McCullough, Mrs. J. Y. 3500 Centralia Ct.
Sloan, Mrs. Herbert 213 Lynnwood, Lincoln Heights

New Albany

Baker, Mrs. A. M. 2523 Glenwood Ct.
Baxter, Mrs. J. W., Jr. 426 Woodrow Ave.
Best, Mrs. Maurice M. 1233 Vance Ave.

Brown, Mrs. K. H. 1654 Hedden Park
Buchman, Mrs. Marshall 1824 State St.
Cannon, Mrs. Daniel H. 1203 E. Spring St.
Edwards, Mrs. W. F. 615 Beharrel Ave.
Garner, Mrs. Wm. H. 922 E. Spring St.
Garner, Mrs. William H., Jr. 1510 Sunset Dr.
Geyer, Mrs. Joseph H. Old Vincennes Rd.
Harris, Mrs. Robert W. 1923 Ekin Avenue
Hess, Mrs. P. Patrick 1313 Ridgeway Ave., Silver Hills
Higgins, Mrs. John R. Old Vincennes Rd.
LaFollette, Mrs. Donald R. 1224 Westwood Lane
LaFollette, Mrs. Robert E. 2515 Glenwood Ct.
Nedelkoff, Mrs. Bogdan R. R. 2, Box 500
Paris, Mrs. John M. 2003 Lindberg Ct.
Robertson, Mrs. A. N. 323 E. Ninth St.
Sonne, Mrs. Irvin H. 1607 Hedden Court
Streepey, Mrs. Jefferson I. 1919 DePauw Ave.
Voyles, Mrs. Harry 425 Beharrel Ave.
Weaver, Mrs. W. W. Crestview
Wolfe, Mrs. Morton F. Glenwood Court
Wolfe, Mrs. Nelson A. Graybrook Lane
Worley, Mrs. H. L. 1923 DePauw Ave.

Bickers, Mrs. Everett E. Floyd Knobs
Engleman, Mrs. Harry K. Georgetown

FULTON COUNTY

Miller, Mrs. Virgil C. P. O. Box 37, Akron
Stinson, Mrs. Arthur E. Athens
Kraning, Mrs. Kenneth K. 834 West Shore Dr., Culver

Rochester

Dielman, Mrs. Franklin C. 920 Jefferson St.
Herendeen, Mrs. Elbie V. 317 W. Seventh St.
King, Mrs. Milo O. 110½ E. Eighth St.
Richardson, Mrs. Chas. L. R. R. 2, Box 276
Richardson, Mrs. Joseph D. 506 Pontiac St.
Rowe, Mrs. Howard H. 417 W. Ninth St.
Rusler, Mrs. Wm. Jr. R. R. 2
Stinson, Mrs. Dean K. 1318 Main St.

GIBSON COUNTY

Geick, Mrs. Raymond Godfrey 207 N. Main, Ft. Branch
Kenshol, Mrs. William Stanley Owensville
Marchand, Mrs. Edwin V. Haubstadt

Oakland City

Clark, Mrs. Carl M. 123 Vine St.
Dye, Mrs. William E. 518 S. Jackson St.
Wood, Mrs. Russell W. High St.

Princeton

Carpenter, Mrs. Harry Franz 319 E. State
Folck, Mrs. John Kieffer 528 N. Main St.
Graves, Mrs. Orville Melvin 125 W. Walnut
McCarty, Mrs. Virgil 403 W. Spruce
McElroy, Mrs. Robert Samuel 404 W. Walnut
Peck, Mrs. James Frank 605 W. Monroe
Weitzel, Mrs. Roland Earl 309 W. Spruce
Wells, Mrs. William R. Broadview Addition

GRANT COUNTY

Marion

Abell, Mrs. Charles F. 915 Wabash Ave.
Alderfer, Mrs. Henry 919 Euclid Ave.
Ansbacher, Mrs. Stefan R. R. 1
Ayres, Mrs. W. W. 820 Jeffras Ave.
Bailey, Mrs. Douglas 1316 Elm Lane
Bloom, Mrs. A. Ward 610 River Rd.
Braunlin, Mrs. Robert 315 N. Hill St.
Brown, Mrs. Robert M. 825 Euclid Ave.
Comeau, Mrs. Wm. J. 918 Hawthorne
Cunningham, Mrs. Robert 1017 Euclid Ave.
Davis, Mrs. Joseph B. 121 No. Washington St.
Davis, Mrs. Merrill S. 725 Euclid Ave.
Donaldson, Mrs. Miles 1116 Spencer Ave.
Dunbar, Mrs. Fred 1415 S. Adams St.
Eshleman, Mrs. L. H. 129 North Washington
Fisher, Mrs. Henry R. R. 4
Fuelling, Mrs. James 1610 Parkview Dr.
Ganz, Mrs. Max 904 Jeffras Ave.
Goldsmith, Mrs. David 1225 Jeffras Ave.
Hover, Mrs. Galen M. 27 A Veterans Hosp.
Huff, Mrs. Asher 110 North E. St.
Hummel, Mrs. R. M. 2411 Lommel Lane
Jarrett, Mrs. John C. 3418 Wildwood Dr.
Lahr, Mrs. Richard E. 1627 Broadview Dr.
Langrall, Mrs. Harrison M. 715 Crossway
Lavengood, Mrs. Russell W. Charles Rd. R. R.
Lonngren, Mrs. Dudley 307 Kem Rd.
Love, Mrs. Logan 808 Crossway
Miller, Mrs. H. Allison 1010 W. 4th Street
Pattison, Mrs. John D. 1315 Elm Lane
Pearcy, Mrs. Marcene 3116 Coats Rd.
Powell, Mrs. J. P. 127 River Dr.
Price, Mrs. Ambrose M. 2938 S. Branson St.
Ranno, Mrs. Frederick S. Veterans Hosp.
Reid, Mrs. James D. 505 Buckingham Dr.
Renbarger, Mrs. Lester 2111 Wabash Pike
Rhamy, Mrs. Arthur 1230 Euclid Ave.
Rhomy, Mrs. Donald F. 1632 Broadview Dr.
Rhorer, Mrs. John G. 711 Wabash Ave.
Richardson, Mrs. Jos. H. 911 River Dr.
Schroeder, Mrs. Robert W. 2123 S. Boots St.
Simmons, Mrs. Frederick H. 2607 Beech Lane
Skomp, Mrs. Claud E. 1123 Euclid Ave.
Smith, Mrs. Barton T. 1005 Audubon Dr.
Snowhite, Mrs. Arthur B. 508 S. Whites Ave.
Stancliff, Mrs. Floyd S. Veterans Hosp.
Stenger, Mrs. R. H. 227 North E. St.
Thompson, Mrs. B. Jay 123 River Dr.
Walton, Mrs. R. Lee 1019 Lincolnshire Blvd.
Warren, Mrs. Carroll B. 1211 Euclid Ave.
Weinberg, Mrs. Samuel 905 Euclid Ave.
Wilson, Mrs. Ned 317 Western Ave.
Woodbury, Mrs. J. W. 711 W. Nelson St.
Young, Mrs. Robert G. 1207 Northwood Dr.

Malott, Mrs. Fred Converse
Grant, Mrs. Arthur 501 W. 3rd St., Fairmount
Yale, Mrs. Charles Fairmount
Garrison, Mrs. L. J. 515 E. Main St., Gas City
Koontz, Mrs. William A. 334 E. Main, Gas City
Baskett, Mrs. R. J. Jonesboro
King, Mrs. P. C. Swayzee
Beck, Mrs. Thomas Swayzee
Taylor, Mrs. E. C. Upland
McIlwain, Mrs. Robert Warren

HAMILTON COUNTY

Karlick, Mrs. Joseph R. Arcadia
Thomas, Mrs. W. Clayton 80 4th Ave. S.E., Carmel
Havens, Mrs. Oscar Cicero

Noblesville

Ambrose, Mrs. J. C. 298 N. Ninth
Blackburn, Mrs. Howard Allisonville Rd.
Campbell, Mrs. Sam W. R. R. 1
Hash, Mrs. John S. R. R. 4
Haywood, Mrs. John G. 1260 Lincoln Dr.
Kraft, Mrs. Haldon C. R. R. 5
Lanning, Mrs. R. Adrian R. R. 3
Lloyd, Mrs. Joe R. 559 Sunset Dr.

Shanks, Mrs. Ray W.....R. R. 5

Long, Mrs. Malcolm
7605 Westfield Blvd., Indianapolis 40
Manhart, Mrs. Doyle B....501 E. 2nd St., Sheridan
Newby, Mrs. Eugene.....209 W. 4th St., Sheridan
Waitt, Mrs. Paul.....Sheridan
Connoy, Mrs. Andrew.....Westfield
Connoy, Mrs. Leo.....139 N. Union St., Westfield

HANCOCK COUNTY

Johnston, Mrs. W. R.....Charlottesville
Scott, Mrs. Robert.....Charlottesville
Rhynearson, Mrs. Hal R...235 Merrill St., Fortville

Greenfield

Allen, Mrs. Joseph.....210 E. Lincoln
Beeson, Mrs. Wilbur.....209 N. Penn.
Endicott, Mrs. Wayne.....115 McClellan
Farrell, Mrs. John J., Jr.....1001 N. State
Gill, Mrs. Dee Dar.....328 Park St.
Hunter, Mrs. Donn R.....10 Boyd Ave.
Kinneman, Mrs. Robert E.....McClelland Dr.
Kirby, Mrs. Ted C.....122 Grandison Rd.
Smith, Mrs. John H.....919 Maple Dr.
Vingis, Mrs. Bronie A.....705 N. State St.
Woods, Mrs. James R.....715 N. East St.

Garrison, Mrs. James.....Cumberland
Pierson, Mrs. Thomas A.....New Palestine
Cagle, Mrs. Robert.....New Palestine
Freeborn, Mrs. Warren.....Oaklandon
Miller, Mrs. Joseph A.....R. R. 12, Box 230 Y, Oaklandon
Kuhn, Mrs. Robert.....Wilkinson

HENDRICKS COUNTY

Chase, Mrs. Thomas P.....U. S. 36, Avon
Black, Mrs. James..8 Green Acre Ct., Brownsburg
Foltz, Mrs. Lloyd.....North Ridge, Brownsburg
Scudder, Mrs. A. N.....24 N. Grant, Brownsburg
Walker, Mrs. Thomas..Fairfield Hts., Brownsburg

Danville

Gibbs, Mrs. Joseph W.....445 E. Mill St.
Kirtley, Mrs. Robert W.....R. R. 3, Box 196
Koch, Mrs. Elmer.....301 S. Bowen
Terry, Mrs. Lloyd.....292 W. Marion

Ellis, Mrs. L. Hall.....Lizton
Karpel, Mrs. Bernard.....R. R., Mooresville
Scamahorn, Mrs. Malcolm O.....Pittsboro
Scamahorn, Mrs. Oscar T.....Pittsboro

Plainfield

Aiken, Mrs. Milo M.....140 N. Center
Cohen, Mrs. Irvin G.....645 E. Main St.
Haggard, Mrs. David B.....R. R. 2, Box 23a
Stafford, Mrs. William C.....625 S. East St.
Warbinton, Mrs. Fred P.....680 Avon Rd.

HENRY COUNTY

New Castle

Amos, Mrs. Robert L.....924 Lincoln Ave.
Balcom, Mrs. Francis.....2003 Wuthering Dr.
Bledsoe, Mrs. James.....Hillsboro Rd.
Brock, Mrs. J. T.....St. Rd. 36 East
Burnett, Mrs. Arthur B.....801 Melody Lane
Cain, Mrs. David R.....3701 S. Memorial Dr.
Craig, Mrs. Alex F.....415 Raintree Dr.
Davies, Mrs. Robert R.....1125 Audubon Rd.
Easter, Mrs. James N.....2136 W. Raintree Dr.
Fisher, Mrs. John Edward....1135 Woodlawn Dr.
Foster, Mrs. Ray T.....420 N. Main
Harrison, Mrs. Benjamin L.....233 Bundy Ave.
Heilman, Mrs. William C. Jr....1112 St. James Ct.
Iterman, Mrs. George.....729 I Ave.
Kennedy, Mrs. W. U.....701 S. 14th St.
Life, Mrs. Homer L.....1107 St. James Dr.
McDonald, Mrs. Frank G.....527 S. Main St.
McElroy, Mrs. James S.....1213 Audubon Rd.
McKee, Mrs. Roy.....Parkplace
Murray, Mrs. William E.....100 Van Nuys Rd.
Saint, Mrs. William.....705 Hawthorn Rd.
Smith, Mrs. Mark.....631 S. 11th St.
Steussy, Mrs. Calvin N.....601 Hosier Dr.
Stricker, Mrs. Paul J.....719 Fair Oaks Dr.
Thorne, Mrs. Charles E.....1225 Audubon Rd.
Vivian, Mrs. Donald E.....2715 Fair Oaks Dr.
Wiggins, Mrs. D. S.....219 S. 12th

Clark, Mrs. M. E.....Cambridge City
Hollenberg, Mrs. A. E.
105 N. Franklin St., Hagerstown
Wiatt, Mrs. Leonard H.
108 N. Wash. St., Knightstown
Stauffer, Mrs. George E.....Mooreland
Marshall, Mrs. Lloyd.....Walnut, Mt. Summit
Robertson, Mrs. William S.....Spiceland

HOWARD COUNTY

Denton, Mrs. Larkin D.....S. Meridian, Greentown
Shoup, Mrs. E. M.....N. Meridian, Greentown

Kokomo

Adams, Mrs. C. J.....1216 W. Superior
Althoff, Mrs. William.....2501 S. Wabash
Alward, Mrs. J. H.....401 W. Walnut
Artis, Mrs. Myrle E.....910 E. Broadway
Ault, Mrs. Carl H.....3015 Dellwood Drive
Belding, Mrs. Ray T.....100 S., 106 E.
Blaisdell, Mrs. Glenn D.....409 Country Lane
Boughman, Mrs. J.....1610 W. Taylor
Bowers, Mrs. Copeland C.....1530 W. Taylor
Bowers, Mrs. Garvey B.....421 Morningside
Bowers, Mrs. John A.....1535 W. Jefferson
Bradley, Mrs. Richard V.....3210 Janice Dr.
Brown, Mrs. Earl R., Jr.....1414 Kingston Rd.
Bruegge, Mrs. Theodore J.....2225 S. Wabash
Cattell, Mrs. Lee M.....1235 W. Sycamore
Clarke, Mrs. Elton R.....4320 W. Sycamore
Conley, Mrs. Thomas M.....2811 Dellwood Dr.
Craig, Mrs. R. A.....West Sycamore Rd.
Craig, Mrs. Reuben.....410 S. Hickory Lane
Cuthbert, Mrs. F. S.....1027 W. Walnut
Earl, Mrs. Max M.....2210 S. Wabash
Ericson, Mrs. Homer S.....124 Leafy Lane
Ferry, Mrs. Paul W.....1207 W. Sycamore
Fields, Mrs. Donald L.....3021 Mayfair
Frazier, Mrs. Jack L.....2318 S. Wabash
Fretz, Mrs. Richard C.....4701 Mayfield Dr.
Golper, Mrs. Marvin N.....411 Morningside Drive
Good, Mrs. Richard P.....227 N. Forest Dr.
Grothouse, Mrs. Carl B.....515 Rainbow Dr.
Halfast, Mrs. Richard W.....2505 Katherine Ave.
Harshman, Mrs. James.....4400 Mayfield Dr.
Hutto, Mrs. William H.....West Sycamore Rd.
Jewell, Mrs. G. M.....1318 W. Sycamore
Kremers, Mrs. George A.....2401 S. Wabash
Longshore, Mrs. Robert E.....145 Westmoreland
McClure, Mrs. Warren N.....309 Lody Lane
McIndoo, Mrs. R. E.....820 W. Walnut
Mendelson, Mrs. Stanley M.....2325 S. Wabash
Michael, Mrs. Robert L.....4610 W. Sycamore Rd.
Morrison, Mrs. W. R.....415 Conradt Ave.
Murray, Mrs. Ernest C.....2200 S. Webster
Paris, Mrs. Durward W.....2417 S. LaFountain
Perkins, Mrs. John L.....2425 S. Washington
Phares, Mrs. Robert W.....R. R. 1, Box 31A
Prather, Mrs. Philip E.....123 Magnolia Dr.
Radpour, Mrs. Shokri.....4509 Mayfield Dr.
Rudicel, Mrs. Max W.....321 Kingston Rd.
Schwartz, Mrs. F. C.....5015 W. Sycamore Rd.
Shenk, Mrs. Earl M.....306 N. Webster

Smith, Mrs. G. J.....821 E. Dixon St.
Sorenson, Mrs. Raymond.....4401 Mayfield Dr.
Spangler, Mrs. J. S.....2126 S. Webster
Wachob, Mrs. Tom W., Jr.....806 James Dr.

Smith, Mrs. Charles
6487 N. Park Ave., Indianapolis
Evans, Mrs. Robert W.....Russiaville
Ware, Mrs. John R.....Russiaville
Tranter, Mrs. Frank.....Sharpsville

HUNTINGTON COUNTY

Huntington

Brubaker, Mrs. Harold S.....721 Flaxmill Rd.
Casey, Mrs. Stanley M.....408 E. Market St.
Clark, Mrs. Joseph H.....816 Henry St.
Cope, Mrs. Stanton E.....1022 N. Jefferson St.
Doermann, Mrs. Paul E.....1522 Cherry St.
Erehart, Mrs. Mark G.....Maple Grove Rd.
Eviston, Mrs. J. Boyd.....1362 Poplar St.
Gill, Mrs. D. Richard.....1412 Oak St.
Grayston, Mrs. Wallace S.....303 E. Market St.
James, Mrs. Thomas, Jr.....1044 Poplar St.
Marks, Mrs. Howard H.....1120 N. Jefferson
Meiser, Mrs. Robert D.....1738 Cherry St.
Mitman, Mrs. Floyd B.....1470 Poplar St.
Omstead, Mrs. Trevalyn W.....229 Vine Street
Peare, Mrs. Reeve B.....1568 Jefferson St.
Van Campen, Mrs. Warren.....354 E. Washington
Wagner, Mrs. Richard W.....Old Andrews Rd.

Woods, Mrs. Halden C.....Markle
Cooper, Mrs. B. Trent.....Roanoke
Bennett, Mrs. J. B.....Warren
Ray, Mrs. Carl S.....Box 55, Warren

JACKSON-JENNINGS COUNTIES

Brownstown

Gillespie, Mrs. G. R.....701 Commerce
Scharbrough, Mrs. William.....R. R. 2
Shields, Mrs. Jack.....721 W. Spring
Shortridge, Mrs. Wilbur.....R. R. 1

Crothersville

Adair, Mrs. W. K.....208 S. Armstrong
Bard, Mrs. Frank B.....305 E. Howard

North Vernon

Berkshire, Mrs. Shaffer.....110 Long St.
Calli, Mrs. Louis J.....408 S. State
Ellis, Mrs. Forrest D.....130 W. Long St.
Johnson, Mrs. William J.....318 Jennings St.
Thayer, Mrs. Benet W.....214 Jennings St.

Seymour

Baxter, Mrs. Harry.....710 West Dr., Sunset Pkwy.
Black, Mrs. J. M.....671 Braewick Rd., Sunset Pkwy.
Bobb, Mrs. Kenneth E.....311 Lee Blvd.
Bosch, Mrs. Ralph O.....930 South Dr., Sunset Pkwy.
Day, Mrs. Durbin.....515 W. Sixth St.
Graessle, Mrs. H. P.....640 East Dr., Sunset Pkwy.
Kamman, Miss Martha.....332 W. Oak St.
Martin, Mrs. Guy.....1408 Ewing Rd.
Ripley, Mrs. John W.....2001 Ewing St.
Templeton, Mrs. Ian.....348 Carter Blvd.
Wiethoff, Mrs. C. A.....615 West Dr., Sunset Pkwy.

Knotts, Mrs. Slater.....R. R. 1, Elizabethtown

JASPER-NEWTON COUNTIES

Yegerlehner, Mrs. R. S.....Kentland

Rensselaer

Beaver, Mrs. Raymond E.....111 Thompson St.
Greene, Mrs. Robert W.....732 Elza St.
Jones, Mrs. Edwin F.....406 Milton
O'Brien, Mrs. Francis E.....530 Park Ave.
Ockerman, Mrs. Kenneth R.....202 Home St.
Williams, Mrs. Paul A.....402 N. Weston St.

JAY COUNTY

Andrews, Mrs. Frank.....R. R. 2, Geneva
Donnally, Mrs. George.....R. R. 1, Geneva
Shroyer, Mrs. Herbert.....Dunkirk

Portland

Badders, Mrs. Ara C.....709 W. North
Cripe, Mrs. Wm. H.....507 W. High
Fitzpatrick, Mrs. James S.....405 W. Race
Gillum, Mrs. Eugene.....W. Votaw Street
Keeling, Mrs. F. E.....609 W. Race
Morrison, Mrs. George G.....R. R. #4
Schenck, Mrs. Ralph.....R. R. 2, W. 7th St.
Spahr, Mrs. Donald E.....615 W. Race
Steffy, Mrs. Ralph M.....321 E. Race
Vormohr, Mrs. J.....1011 S. Meridian St.

JOHNSON COUNTY

Franklin

Andrews, Mrs. Hugh K.....R. F. D. 4
Bullers, Mrs. Robert C.....395 S. Home Ave.
Bullington, Mrs. George.....R. F. D. #4
Chappel, Mrs. A. T.....1101 North Dr.
Deppe, Mrs. Charles F.....1215 Park Ave.
Ferrara, Mrs. Joseph F.....1000 E. King St.
Foster, Mrs. R. H. K.....1025 Orchard Lane
Hibbs, Mrs. W. G.....R. F. D. 1, Franklin
Jones, Mrs. Charles A.....1010 E. Adams Dr.
Mock, Mrs. Harry E.....201 E. Monroe St.
Murphy, Mrs. Harry E.....150 N. Main St.
Portteus, Mrs. Walter L.....R. R. 2
Province, Mrs. Wm. D.....51 N. Water St.
Records, Mrs. Arthur W.....216 E. Jefferson St.
Records, Mrs. John M.....1138 Orchard Lane
Ritteman, Mrs. George.....R. R. 3, Box 19A
Stogsdill, Mrs. W. W.....R. R. #4
Walters, Mrs. Jack L.....1205 E. Jefferson St.
Wesemann, Mrs. Merrill M.....17 Morning Dr.

Greenwood

Brown, Mrs. George E.....404 Beech Park Dr.
Link, Mrs. Charles.....380 N. Madison Ave.
Machledt, Mrs. John.....243 S. Madison Ave.
Ogle, Mrs. Robert.....474 W. Wiley
Onyett, Mrs. Harold.....R. R. 3, Box 32
Sheek, Mrs. Kenneth I.....407 S. Forest Dr.
Snodgrass, Mrs. Robert.....360 S. Madison
Tiley, Mrs. George.....40 N. Madison
Young, Mrs. Joseph W.....400 N. Madison St.

KNOX COUNTY

Shanklin, Mrs. Jack L.....N. Main, Bicknell

Vincennes

Anderson, Mrs. John B.....1202 Busseron St.
Anderson, Mrs. Richard M.....Monroe City Rd.
Arbogast, Mrs. Paul B.....1420 Old Orchard Rd.
Barrett, Mrs. Thomas L.....2520 Old Orchard Rd.
Bartlett, Mrs. Donald T.....1405 Kimmell Rd.
Beckes, Mrs. Ellsworth W.....220 N. 5th
Black, Mrs. Boyd K.....1008 State Road 67-N
Chattin, Mrs. Herbert O.....729 Main
Coffel, Mrs. Melvin H.....Simpson Lake
Edwards, Mrs. Edward T., Jr.....Old Bruceville Rd.
Hendrix, Mrs. Charles.....1202 E. Sycamore
Humphreys, Mrs. Joe S.....1602 Weed Lane
McCormick, Mrs. Hubert D.....518 N. Fourth
McMahan, Mrs. V. C.....Monroe City Rd.
Nichols, Mrs. Robert J.....1515 Burnett Lane
Parmenter, Mrs. Harry B.....205 Elm Ln.
Reilly, Mrs. James F.....401 Buntin
Shaffer, Mrs. Kenneth L.....2600 Ridge Rd.
Smith, Mrs. S. Joseph.....504 N. Fourth Street
Smith, Mrs. Ralph O.....Old Bruceville Rd.

Spencer, Mrs. Frederic....902 Perry Street
Stein, Mrs. Richard H....1209 Old Orchard Rd.
Stewart, Mrs. Frank W....Hillcrest Rd.
Sullenger, Mrs. A. A....803 Seminary St.
Tolbert, Mrs. Robert D....9 S. 20th
Vaughn, Mrs. Walter R....2018 Prospect Ave.
Welch, Mrs. Norbert M....Monroe City Rd.

KOSCIUSKO COUNTY

Poehler, Mrs. Frederick....Claypool
Urschel, Mrs. Dan L....Mentone
Wilson, Mrs. Wymond B....P. O. Box 421, Mentone
Hursey, Mrs. Virgil G....Milford
Pierson, Mrs. Pearl H....R. R. 1, Silver Lake
Baum, Mrs. John R....307 7th St., Winona Lake

Warsaw

Arford, Mrs. John E....E. Center St.
Cron, Mrs. William....1548 Country Club Dr.
Hashemi, Mrs. Hossein....1306 Ranch Rd.
Haymond, Mrs. George M....945 Country Club Dr.
Hillery, Mrs. John L....823 E. Center
Hogle, Mrs. Frank....R. F. D. 2
Laird, Mrs. L. A....322 S. Indiana
Murphy, Mrs. Samuel C....216 South High St.
Reed, Mrs. E. A....1219 E. Main St.
Richer, Mrs. Orville....914 E. Main St.
Schlemmer, Mrs. George H....528 N. Lake St.
Shrader, Mrs. Carl....Spring Hill Acres
Thomas, Mrs. E. Winton....711 E. Main St.

LAKE COUNTY

Cedar Lake

King, Mrs. R. W....R. R. 1, Box 6
Miller, Mrs. Donald C....P. O. Box 297
Misch, Mrs. William A....R. R. 4, Box 58

Crown Point

Gutierrez, Mrs. P. E....729 Williams Dr.

East Chicago

Campagna, Mrs. E. A....4320 Ivy St.
Ernst, Mrs. H. C....4219 Baring Ave.
Fleischer, Mrs. J. C....4135 Ivy St.
Grosso, Mrs. William G....4132 Northcote Ave.
Gustaitis, Mrs. John W....4318 Parrish Ave.
Niblick, Mrs. James S....4115 Fir St.
Perdomo, Mrs. Octavio....4217 Euclid
Romero, Mrs. Plinio....531 W. 142 St.
Serna, Mrs. Jesus Arteaga....4316 Parrish Ave.
Shapiro, Mrs. Joseph....4214 Parrish Ave.

East Gary

Markle, Mrs. Joseph G....3143 Ripley
Mather, Mrs. J. Winford....2367 Vigo St.
Penn, Mrs. R. A....2334 Vigo St.

Gary

Agana, Mrs. Consuelo....6121 Birch Ave.
Almquist, Mrs. C. O....550 Lincoln St.
Barton, Mrs. Reginald....7165 Birch St.
Behn, Mrs. Walter....1514 W. 5th St.
Bills, Mrs. R. J....410 Roosevelt
Bills, Mrs. Robert N....534 Lincoln St.
Brady, Mrs. Samuel G....451 Garfield St.
Bringas, Mrs. Irineo B....803 Johnson St.
Brincko, Mrs. John....3537 Harrison St.
Cahue, Mrs. A. R....634 Taft
Carbone, Mrs. Joseph A....526 Johnson St.
Elliott, Mrs. Ralph A....1726 W. Sixth Ave.
English, Mrs. Hubert M....575 Taft St.
Franklin, Mrs. Philip....1074 Wayne St.
Gallinatti, Mrs. J. J....7413 Locust St.
Glover, Mrs. W. J....3540 Taylor Ave.
Goldberg, Mrs. Harold B....825 W. 35th Ave.
Goldstone, Mrs. Adolph....1430 W. Seventh St.
Goldstone, Mrs. Joseph....339 W. 35th Ave.
Gregoline, Mrs. A. F....700 Arthur
Hadey, Mrs. James H....505 Taft St.
Jahns, Mrs. A. A....655 Roosevelt St.
Kendrick, Mrs. Frank J....701 Polk St.
Kolettis, Mrs. J. G....847 W. 45th St.
Kopcha, Mrs. Joseph E....650 Pierce St.
Lazo, Mrs. Vicente....707 Harrison St.
Manalo, Mrs. F. S....538 Lincoln St.
May, Mrs. R. Milton....667 Van Buren St.
Milos, Mrs. Robert....725 Filmore St.
Moswin, Mrs. Jack A....701 Arthur St.
Nelson, Mrs. Walfred A....1050 Warren St.
Olson, Mrs. Leslie....716 Grant St.
Ornelas, Mrs. Joseph P....6339 Oakwood Lane
Pappas, Mrs. Edward T....569 Pierce St.
Poracky, Mrs. Bernard F....5598 Van Buren St.
Radigan, Mrs. Leo R....6624 Birch St.
Ramos, Mrs. Alfonso....5485 California
Robinson, Mrs. Walter K....500 N. Montgomery St.
Rubin, Mrs. Simon S....2131 W. Fifth Ave.
Schulz, Mrs. Kurt J....5814 Roosevelt St.
Scully, Mrs. John T....715 Johnson St.
Senese, Mrs. Thomas J....581 Johnson St.
Shevick, Mrs. Alexander....733 Filmore St.
Slama, Mrs. Geo. F....3520 Polk St.
Spellman, Mrs. Frank W....6941 Ironwood Ave.
Stimson, Mrs. Harry R....4338 Jefferson St.
Thomas, Mrs. Daniel D....2001 W. 7th Ave.
Yast, Mrs. Charles J....740 Filmore St.
Yocum, Mrs. Paul S. Jr....2200 Ranburn
Young, Mrs. George M....4580 Washington St.
Zucker, Mrs. Edward....7009 E. 1st St.

Griffith

Carpenter, Mrs. B. F....808 Glenwood
Lundeberg, Mrs. Ralph A....1211 N. Harvey
Siekierski, Mrs. J. M....445 N. Broad Street

Hammond

Allegretti, Mrs. Michael L....6237 Forest Ave.
Alt, Mrs. Edward M., Jr....7212 Tilly Dr.
Bacevich, Mrs. A. J....6939 Olcott Ave.
Barron, Mrs. Elmer Abraham....6635 Kansas
Beconovich, Mrs. Robert....6540 Forest Ave.
Bombar, Mrs. Leslie E....6826 Rosewood
Bonaventura, Mrs. Angelo P....7112 Woodmar Ave.
Cotter, Mrs. Edward R....7225 Knickerbocker
Dosado, Mrs. E. B....7530 Magoun
Eggers, Mrs. Ernest....635 165th St.
Eggers, Mrs. H. W....6542 Hohman Ave.
Egnatz, Mrs. Nick....820 Highland St.
Elledge, Mrs. Ray....6415 Forest Ave.
Fedor, Mrs. T. A....6716 Magoun
Fischer, Mrs. Burnell....49 Indi-Illi Park
Gevirtz, Mrs. Milton B....7142 Hohman Ave.
Hack, Mrs. Edmund C....7147 Olcott St.
Hickman, Mrs. A. Lee, Jr....7412 Knickerbocker
Howard, Mrs. Wm. H....41 Glendale Pk.
Husted, Mrs. Robert G....7248 Forest Ave.
Kmak, Mrs. Chester John....6832 Magoun Ave.
Komoroske, Mrs. John E....35 Highland Ave.
Koransky, Mrs. David S....7048 Forest Ave.
Kretsch, Mrs. Russell W....7214 Hohman Ave.
Marks, Mrs. Ora L....7111 Olcott Ave.
Marshall, Mrs. W. J....7818 Catalpa
Mason, Mrs. Richard L....132 Rimbach Ave.
Modjeski, Mrs. Joseph R. 7327 Knickerbocker Pkwy.
Neal, Mrs. L. W....7301 Forest Ave.
Panares, Mrs. Solomon V....4-172nd Place

Peck, Mrs. Edward A. 6422 Moraine Ave.
Pilot, Mrs. Jean 7137 Knickerbocker Pkwy.
Polite, Mrs. Nicholas L. 650 Roosevelt
Premuda, Mrs. Franklin F. 7042 Woodmor
Ramker, Mrs. Daniel T. 7129 Arizona Ave.
Remich, Mrs. Antone C. 6412 Moraine Ave.
Rendel, Mrs. Donald T. 18—172nd Pl.
Repay, Mrs. W. A. 7505 Knickerbocker Pkwy.
Rhind, Mrs. A. W. 7126 Forest Ave.
Rosevear, Mrs. Henry J. 6531 Forest Ave.
Row, Mrs. Perrie Quentin 6712 Hohman Ave.
Rubright, Mrs. Robert L. 7258 Forest Ave.
Rudolph, Mrs. F. G. 6607 Forest Ave.
Santare, Mrs. Vincent J. 6508 Forest Ave.
Stecy, Mrs. Peter 1543 Warwick
Stern, Mrs. S. Lewis 226 Oakwood
Teegarden, Mrs. Joseph A., Jr.
7204 Woodman Ave.
Thegze, Mrs. George A. 7435 Olcott Ave.
Trachtenberg, Mrs. Lee 7226 Tilly Dr.
Wong, Mrs. Samuel N. 632—169th St.

Highland

Beilke, Mrs. C. A. 8723 Parkway Dr.
Larrabee, Mrs. James 2214 Oakedale
Tilka, Mrs. Ed. C. 8740 Parkway
White, Mrs. G. H., Jr. 8754 Parkway Dr.

Hobart

Bernard, Mrs. Marvin R. 651 Walter St.
Faulkner, Mrs. Donald 295 S. Wisconsin
Kellar, Mrs. Philip E. 1331 Lincoln St.
Pike, Mrs. Warren, Jr. Ainsworth Rd.

Munster

Angel, Mrs. Virgil E. 8638 Boring Ave.
Arbeiter, Mrs. Herbert I. 119 Beverly Place
Arrowsmith, Mrs. James L. 8138 Forest Ave.
Benchik, Mrs. Frank A. 8326 Hawthorne Dr.
Boys, Mrs. F. F. 8517 Crestwood Ave.
Chael, Mrs. Tom C. 225 Belmont Place
Costello, Mrs. Albert J. 1404 Fisher
Espino, Mrs. J. C. 8523 Forest Ave.
Gardiner, Mrs. H. Glen 1406 McArthur
Kenney, Mrs. Francis 8131 Forest Ave.
Kuhn, Mrs. Arthur J. 1535 35th St.
Lanman, Mrs. John U. 1448 MacArthur Blvd.
Lautz, Mrs. Herbert A. 7943 Forest Ave.
Long, Mrs. Keith J. 1327 Ridgeway
Madlang, Mrs. R. M. 7750 Hohman
Marks, Mrs. Salvo P. 8320 Parkview Ave.
Mason, Mrs. John C. 7939 Jackson
McLean, Mrs. James S. 1836 Ridge Rd.
Modjeski, Mrs. Raymond J. 1448 Elliott Dr.
Montes, Mrs. H. 7915 Hohman Ave.
Nierman, Mrs. Murray 1544 Fischer
Paul, Mrs. Eudell G. 7905 Hohman
Rasch, Mrs. George C. 1519 35th St.
Rosenthal, Mrs. Carl 8330 Schrieber Dr.
Schlesinger, Mrs. Daniel J. 1506 MacArthur Blvd.
Schlesinger, Mrs. Jacob 7648 Hohman Ave.
Shapiro, Mrs. Seymour W. 1517 Melbrook
Smith, Mrs. Jerald 239 Fairbanks
Snyder, Mrs. J. 8009 State Line
Sroka, Mrs. Stanley J. 7540 Forest Ave.
Stasick, Mrs. Murray 8611 Boring Ave.
Stevens, Mrs. Edwin W. 8627 Beech
Sweany, Mrs. S. 8030 Jackson
Teplinsky, Mrs. L. L. 1528 Twelve Oaks Dr.
Westhaysen, Mrs. Peter V. 127 Beverly Pl.
Wooden, Mrs. Thomas F. 8351 Crestwood

Whiting

Greisen, Mrs. J. C. 1709 Stanton Ave.
Weinberg, Mrs. B. A. 2022 Lake Ave.

Ambrozaitis, Mrs. Kazys G.
Box 404, Ogden Dunes
Armalavage, Mrs. Leon J. R. R. 4, Valparaiso
Dimitroff, Mrs. Lambro
1021 Forest Hills, Calumet City, Ill.
Feinsot, Mrs. Irving
17 Forestdale Park, Calumet City, Ill.
Mansueto, Mrs. Mario D.
4 Forestdale, Calumet City, Ill.
Sroka, Mrs. A. G. 17216 Wentworth Ave., Lansing, Ill.
Stasick, Mrs. Murray .. 228 W. Warren, Lansing, Ill.
Portney, Mrs. Fred 15520 Dante, Dolton, Ill.
Tyrrell, Mrs. Joseph J.
16041 S. Ellis, South Holland, Ill.

LaPORTE COUNTY

LaPorte

Backer, Mrs. George P. 1533 Michigan Ave.
Carpentier, Mrs. James R. 110 W. 15th St.
Carter, Mrs. Fred Stuart 208 Forest Dr.
Cartwright, Mrs. J. D. 714 Kentucky
Durham, Mrs. Lowell J. 1808 Indiana Ave.
Elshout, Mrs. Clement H. 1311 Michigan Ave.
Erwin, Mrs. Winford R. 505 Third St.
Kelsey, Mrs. Robert Moffat, Jr. 1305 Indiana
Kelsey, Mrs. Robert M., Sr. 702 Maple Ave.
Kepler, Mrs. Robert W. 1529 Michigan Ave.
Larson, Mrs. Goyt O. Ridgefield Addition
Mead, Mrs. Frank E. 344 Grayson Rd.
Moosey, Mrs. Louis 2007 Michigan Ave.
Mueller, Mrs. Edwin C. 117 Evergreen Dr.
Philbrook, Mrs. Seth S. 212 Forest Dr.
Richter, Mrs. John C. 2020 Beechwood Ct.
Scott, Mrs. John S. 508 Lake Shore Dr.
Von Asch, Mrs. George 2030 Michigan Ave.
Wolf, Mrs. William E. 370 Oak Dr.

Westville

Constan, Mrs. Evan P. O. Box 473
Dieter, Mrs. William J. .. Beatty Memorial Hospital
Johnston, Mrs. Donald D. .. Beatty Memorial Hosp.
Matthew, Mrs. John R. P. O. Box 473
Morton, Mrs. David P. O. Box 473
Oster, Mrs. Jack H. P. O. Box 473
Sennett, Mrs. Cecil M. P. O. Box 473

LAWRENCE COUNTY

Bedford

Allen, Mrs. L. Howard 1318 14th St.
Austin, Mrs. Richard P. 1315 15th St.
Campbell, Mrs. William T. 348 Eastwood Dr.
Duncan, Mrs. Raymond E. 407 Northwood Dr.
Dusard, Mrs. Joseph C. 1107 N St.
Edmonds, Mrs. Kendrick T. 1303 15th St.
Emery, Mrs. Charles B. Brook Knoll
Fountaine, Mrs. Thomas J. 1620 18th St.
Hammel, Mrs. Howard T. 1822 15th St.
Hawkins, Mrs. Richard D. 1308 15th St.
Kasting, Mrs. Gerald E. Parkview Addition
Kerr, Mrs. Donald M. 1415 20th St.
Morrow, Mrs. Robert J. 501 Southwood St.
Noe, Mrs. William R. 118 Woodhill Dr.
Scherschel, Mrs. John P. 1713 H St.
Waldo, Mrs. Guy Harold Jr. 308 Eastwood Dr.
Wohlfeld, Mrs. J. B. 1224 15th St.
Woolery, Mrs. Richard R. 2020 Denson Ave.

Hamilton, Mrs. James 703 Oak St., Mitchell
Oswalt, Mrs. James 901 Curry St., Mitchell
Benham, Mrs. Lawrence Edward
R. R. 2, Springville

MADISON COUNTY

Leroy, Mrs. A. G.....Alexandria
Owens, Mrs. T. F.....302 Lincoln Ave., Alexandria

Anderson

Aagesen, Mrs. W. J.....3 Wind Ridge
Armington, Mrs. John C.....206 W. 14th St.
Austin, Mrs. Charles E.....1612 Westwood Dr.
Beeler, Mrs. Frank K.....20 Overlook Dr.
Bixler, Mrs. Donald P.....1515 Green Way Dr.
Blassaras, Mrs. Crist A.....916 Dresser Dr.
Bowers, Mrs. Richard C.....1110 Greenway Dr.
Bridges, Mrs. Alvin L.....R. R. 2, Box 296 a
Brown, Mrs. James M.....909 Forest Dr.
Buckles, Mrs. David L.....44 Knoll Rd.
Bush, Mrs. Edw. R.....31 Urban Rd.
Castetter, Mrs. Gregory K...Beverly Terrace Apts.
Conrad, Mrs. Ernest M.....2124 Meridian St.
Doenges, Mrs. James L.....1601 Van Buskirk Rd.
Donaldson, Mrs. Frank C.....2 Wind Ridge Rd.
Drake, Mrs. James R.....2029 W. 12th St.
Drake, Mrs. John C.....920 N. Madison Ave.
Drennen, Mrs. Robert V.....525 Harrison
Dulin, Mrs. Basil B.....1120 Maryland Drive
Ellis, Mrs. Seth W.....1105 Green Way Dr.
Elsten, Mrs. Wayne A.
1333 Maryland Dr., Forest Manor
Erehart, Mrs. Archie D.....1221 Irving Way
Faust, Mrs. Howard Jr.....1321 W. 8th St.
Ferguson, Mrs. Donald H.....3430 Redwood Rd.
Fischer, Mrs. Warren E.....1410 Van Buskirk Rd.
Gante, Mrs. Henry W.....2005 Nichol Ave.
Jones, Mrs. Albert T.....3316 Cherry Rd.
Jones, Mrs. David G.....126 W. 12th St.
Kelly, Mrs. Wendell C.....23 Colony Rd.
Kiely, Mrs. John T.....1011 Raible
Kopp, Mrs. William R.....1200 Arrow Ave.
Lamey, Mrs. Paul T.....1740 W. 10th St.
Land, Mrs. Richard.....509 Pershing Dr.
Larmore, Mrs. Joseph L.....1301 Winding Way
Litzenberger, Mrs. Sam W.....837 Forrest Dr.
Long, Mrs. Paul L.....828 Dresser Dr.
Metcalf, Mrs. George B.....830 W. Eighth St.
Moneyhun, Mrs. James E.....1815 Ivy Dr.
Neale, Mrs. Alfred E.....725 Forest Dr.
Nesbit, Mrs. Leonard L.....60 River Forest
Patterson, Mrs. William K.....3 South Park Dr.
Polhemus, Mrs. Warren C.....1300 W. 11th St.
Rosenbaum, Mrs. Lloyd E.....804 Dresser Dr.
Ross, Mrs. Guy E.....1124 N. Madison Ave.
Sharp, Mrs. William L. 725 North Shore Blvd.
Sheldon, Mrs. Suel A.....2812 Greenbriar Rd.
Stamper, Mrs. Jos. H.....619 State Road 67 West
Stamper, Mrs. Robert J.....3104 Sherman St.
Starks, Mrs. William O.....2536 W. 12th St.
Stinson, Mrs. William M.....17 River Forest
Swan, Mrs. Richard C.....707 Forrest Dr.
Wagoner, Mrs. John R.....3522 Hawthorne Rd.
Weiss, Mrs. Louis L.....1225 N. Madison Ave.
Webb, Mrs. Harry D.....1308 Maryland Dr.
Wilder, Mrs. G. B.....338 W. 8th St.
Williams, Mrs. Francis M.....1012 Park Rd.
Williams, Mrs. Robert H....715 North Shore Blvd.
Wilkinson, Mrs. Roger L.....1525 Winding Way
Wishard, Mrs. Fred B.....2604 E. 4th St.

Bishop, Mrs. Harry A.....Frankton
Williams, Mrs. Robert D.....Markleville
Van Ness, Mrs. William..216 S. Main, Summitville

MARION COUNTY

Dill, Mrs. Charles W.
4111 S. Sherman Drive, Beech Grove
Ramage, Mrs. Walter F...244 S. First, Beech Grove

Indianapolis

A

Albertson, Mrs. Frank P...5031 Rockville Rd. (24)
Aldrich, Mrs. Harry D.....5805 Sherman Dr. (20)
Alig, Mrs. Vincent B. 6453 Green Leaves (20)
Allen, Mrs. Robert K.....737 Sherwood Dr. (40)
Alvis, Mrs. Edmond O.....474 W. 92nd St. (60)
Anshutz, Mrs. E. M.....6340 Braemore Rd. (20)
Antreasian, Mrs. Berj.....5465 Mark Lane (26)
Appel, Mrs. Richard H.....122 E. 61st St. (20)
Arbuckle, Mrs. William E.
5326 E. St. Joseph St. (19)
Arnold, Mrs. Robert D.
6450 Around the Hills Road (26)
Asher, Mrs. Ernest O.....4640 West 71th St. (68)
Asher, Mrs. James.....8381 Moore Rd. (78)
Avery, Mrs. George O.
5321 N. Kessler Blvd. N.D. (8)

B

Bachmann, Mrs. Arnold J.....1615 Oles Drive (8)
Bakemeier, Mrs. Otto H...5535 E. St. Clair St. (19)
Bakemeier, Mrs. Robert E.
1210 N. Butler Ave. (19)
Balch, Mrs. James E.....4444 College Ave. (5)
Ball, Mrs. Joseph E.....6612 E. Ninth St. (19)
Banks, Mrs. Horace M.
3631 Forest Manor Ave. (18)
Baptisti, Mrs. Arthur, Jr...4401 N. Meridian St. (8)
Bartley, Mrs. Max D.
5640 N. Pennsylvania St. (20)
Batman, Mrs. Gordon W..6906 N. Delaware St. (20)
Battersby, Mrs. Stanley....6001 Sunset Lane (8)
Bauer, Mrs. Thomas.....7685 Clarendon Rd. (60)
Baumeister, Mrs. Herbert E.....4421 E. 75th (20)
Beach, Mrs. Robert R.....5810 E. Pleasant Run
Pkwy., N. Dr. (19)
Beasley, Mrs. Thos. J.....715 E. 70th Place (20)
Beaver, Mrs. Howard W.
303 E. Edgewood Ave. (27)
Beck, Mrs. Evart M.....6445 N. Olney St. (20)
Becker, Mrs. Harry G...5641 Haverford Ave. (20)
Beeler, Mrs. John W.....7974 N. Illinois St. (60)
Beeler, Mrs. Raymond C.....3777 N. Meridian (5)
Belt, Mrs. James H.....8271 Forest Lane (40)
Benedict, Mrs. Paul F.....2550 Blue Grass Dr. (8)
Bennett, Mrs. Ivan F.....R. R. 18, Box 285 (24)
Berman, Mrs. J. K.....2810 W. 38th St. (8)
Bibler, Mrs. Lester D..4360 N. Pennsylvania St. (5)
Bill, Mrs. Robert O. 445 Somerset Dr. (60)
Blackwell, Mrs. Donald S. ..2121 Allison Ave. (24)
Blake, Mrs. Albert L.....6471 Knyghton Rd. (20)
Blatt, Mrs. A. Ebner.....5330 N. Illinois St. (8)
Boling, Mrs. Grover C., Jr.
6205 Bramshaw Rd. (20)
Bomalaski, Mrs. Donald
6491 N. Oxford (20)
Bowman, Mrs. George W.
5634 Carrollton Ave. (20)
Boyer, Mrs. Floyd A.....136 S. Wittfield St. (19)
Brady, Mrs. Thomas A., Jr.
225 Wellington Rd. (20)
Brayton, Mrs. John R.
3128 E. Fall Creek Blvd., N. Dr. (5)
Brillhart, Mrs. James R.....5731 Kilmer Lane (20)
Brodie, Mrs. Donald W.....R. R. 13, Box 397 (26)
Brown, Mrs. Archie E.
4145 Melbourne Rd., W. Dr. (8)
Brown, Mrs. David E.....R. R. 16, Box 93 (78)
Brown, Mrs. DeWitt W., Jr.
4363 Cold Springs Rd. (8)
Brown, Mrs. Gordon T...3325 Breckenridge Dr. (8)
Brown, Mrs. Wendell E.....3750 N. Gale St. (18)
Browning, Mrs. James S.
7961 Windcombe Blvd. (40)
Burdette, Mrs. Harold.....6310 Glencoe Dr. (20)
Butler, Mrs. John O.....5528 Manker Ave. (27)
Butler, Mrs. Robert M....4849 N. Ritter Ave. (26)

C

Cahn, Mrs. Hugo.....5535 N. Penn. (20)
Call, Mrs. Herbert F.....710 E. 57th St. (20)
Campbell, Mrs. H. E., Jr.....5739 Haverford (20)
Campbell, Mrs. Robert L...5726 Sherman Ave. (20)
Carson, Mrs. E. Wayne..7177 N. Meridian St. (20)
Carter, Mrs. Oren E.....5461 Kenwood Ave. (8)
Chattin, Mrs. William R...4825 Cavendish Rd. (20)
Chernish, Mrs. Stanley M....4403 Radnor Rd. (26)
Chivington, Mrs. Paul V., Jr...5730 N. Parker (20)
Christie, Mrs. Marvin C.....2436 Cardinal Dr. (27)
Chroniak, Mrs. Walter.....5916 E. Pleasant Run Pkwy., N. Dr. (19)
Clark, Mrs. Geo. A.....1046 Bristol Rd. (80)
Clark, Mrs. Lawson J.
2425 E. Kessler Blvd., E. Dr. (20)
Coggeshall, Mrs. Warren E.
6305 Bramshaw Rd. (20)
Cohn, Mrs. Alvin F.....1120 Southview Dr. (27)
Conway, Mrs. Glenn.....2235 E. Garfield Dr. (3)
Cortese, Mrs. James V.....6302 Minlo Dr. (27)
Cortese, Mrs. Thomas A.....3240 Brill Rd. (27)
Countryman, Mrs. Frank...5633 Central Ave. (20)
Cox, Mrs. C. E.....1950 Westlane Rd. (60)
Cross, Mrs. David G.....3001 Redfern Dr. (27)
Culbertson, Mrs. Clyde G.....6060 Park Ave. (20)
Currie, Mrs. Robert W.....512 E. 57th St. (20)
Curry, Mrs. R. Louis.....7250 N. Chester (40)

D

Daley, Mrs Edward H.
5118 East Dickson Road (26)
Dallas, Mrs. F. R.....7935 E. Michigan (19)
Daly, Mrs. Joseph M.....5969 Singleton Ave. (27)
Davis, Mrs. Sam J.....4545 Broadway (5)
Dearmin, Mrs. Robert M.
3060 N. Meridian No. 501 (8)
DeArmond, Mrs. Albert M.
5401 N. Delaware St. (20)
Deever, Mrs. John W.....6801 S. East St. (27)
Dennison, Mrs. Alfred..7901 Windcombe Blvd. (20)
Denny, Mrs. James W.
6633 Spring Brook, N. Dr. (19)
DeWester, Mrs. Gerald....2802 Lindberg Dr. (27)
Donato, Mrs. Albert M....5915 Lawrence Dr. (26)
Doran, Mrs. J. Hal.....3733 N. Denny St. (18)
Doughty, Mrs. Samuel R., Jr.
5258 Channing Circle (26)
Douglas, Mrs. William T.....40 N. Ritter St. (19)
Dryden, Mrs. Gale E.....5835 N. Tacoma Ave (20)
Dugan, Mrs. William M
5747 Rolling Ridge Rd. (20)
Duncan, Mrs. Stuart....2900 S. Pennsylvania (5)
Dupes, Mrs. Lowell E.....5851 White Oak Ct. (20)
Dyar, Mrs. Edwin W., Jr.
5910 Washington Blvd. (20)
Dyke, Mrs. Richard W.....542 W. 83rd (60)
Dyken, Mrs. Mark L. 6101 N. Delaware (20)
Dziabis, Mrs. M. D.....4243 N. Ralston (5)

E

Eastman, Mrs. Joseph Rilus...220 W. 64th St. (8)
Eaton, Mrs. Edwin R.....5750 Allisonville Rd. (20)
Eaton, Mrs. Lyman D.....R. R. 19, Box 487Y (80)
Egbert, Mrs. Herbert L.....419 W. 63rd St. (8)
Eicher, Mrs. Palmer O..4401 Washington Blvd. (5)
Eldridge, Mrs. Gail E.....5746 Central Ave. (20)
Elkins, Mrs. James P.....2045 Lick Creek Dr. (3)
Ellis, Mrs. Bert E..2595 N. Girls School Rd. (24)
Ellis, Mrs. William N.....4908 E. 46th Street (26)
Emhardt, Mrs. John T.. 3305 Brill Rd. (27)
Ensminger, Mrs. Leonard A.
1321 N. Meridian St. (2)
Evans, Mrs. Paul V.....7415 Dean Rd. (40)
Everly, Mrs. Ralph V.....1105 E. 58th St (20)

F

Fausset, Mrs. C. Basil...7757 N. Meridian St. (60)
Ferry, Mrs. Francis A.....935 Southern Ave. (3)
Finneran, Mrs. Joseph C..3819 N. Delaware St. (5)
Fischer, Mrs. A. Alan.....3230 W. 39th Place (8)
Flanagan, Mrs. Paul M. 5842 N. LaSalle (20)
Flanders, Mrs. Robert, Jr.
4444 Kessler Blvd., East Drive (20)
Flanigan, Mrs. Meredith B...3305 Rutledge Dr. (8)
Flora, Mrs. Joseph O.....5604 Rockville Rd. (24)
Folkening, Mrs. Norval C.....5501 Camden (27)
Forbes, Mrs. Robert S.
4110 Crooked Creek Overlook (8)
Fortuna, Mrs. Frank.....2535 E. Banta Rd. (27)
Foster, Mrs. Lee N., Jr...3824 Ashbourne Ln. (18)
Fouts, Mrs. Paul J.....8393 N. Illinois St. (60)
Franklin, Mrs. William L.....33 E. 37th St.
Freed, Mrs. Carl A.....4334 Springwood Trail (8)
Freeman, Mrs. Leslie W....5601 E. St. Clair (26)
Freeman, Mrs. Max E....4802 Thornleigh Dr. (26)
Fiederlein, Mrs. F. J.....3743 Allison Ave. (24)
Fry, Mrs. Robert D.....5717 Broadway (20)
Funkhouser, Mrs. A. G.....215 E. 36th (5)

G

Gabovitch, Mrs. Edward R...2603 E. 58th St. (20)
Gaddy, Mrs. Nelson D.....2551 Blue Grass Ct. (8)
Gambill, Mrs. J. R.....4651 Cherry Lane (8)
Garber, Mrs. J. Neill.7036 N. Pennsylvania St. (20)
Garceau, Mrs. George J.
5539 N. Pennsylvania St. (20)
Gardiner, Mrs. Sprague H.....330 W. 62nd St. (8)
Gardner, Mrs. Austin.....7701 N. Penn. (40)
Gardner, Mrs. Buckman.....22 E. 52nd St. (20)
Garner, Mrs. W. Stanley..4021 Cranbrook Dr. (40)
Garrett, Mrs. Robert A.....95 Wellington Rd. (8)
Gastineau, Mrs. Frank M.
4444 Kessler Blvd., E. Dr. (20)
Geider, Mrs. Roy A.
5816 Pleasant Run Pkwy., N. Dr. (19)
Geisler, Mrs. Hans E.....6154 E. 43rd St. (26)
Gick, Mrs. Herman H.....451 Eastern Ave. (1)
Gifford, Mrs. Fred E.....5125 N. Meridian St. (8)
Gillespie, Mrs. Charles F...4530 Berkshire Rd. (18)
Gillespie, Mrs. Jacob E.....4426 Broadway (5)
Ginsberg, Mrs. S. T.....7222 Stevens Lane (60)
Goldman, Mrs. Samuel....428 Woodmere Dr. (20)
Gooding, Mrs. Richard A.....2850 W. 52nd St.
Gormley, Mrs. Joseph J.
4560 Crooked Creek Ridge Dr. (8)
Graham, Mrs. John D.....6401 Osborn Dr. (26)
Grayson, Mrs. Ted....925 Forest Blvd. N. Dr. (40)
Greene, Mrs. Morgan E...3029 E. Hanna Ave. (27)
Greist, Mrs. John H.....4343 Washington Blvd. (5)
Griffin, Mrs. Leslie.....3203 W. 57th St. (8)
Griffith, Mrs. Richard S.
2002 Cunningham Road (24)
Grisell, Mrs. Ted L...5211 Brendon Ridge Rd. (26)
Gruber, Mrs. Charles M., Jr.
3102 Kessler Blvd., E. Dr. (20)
Gruesen, Mrs. R. A...6249 Avalon Lane E. Dr. (20)
Gustafson, Mrs. Gerald S.
5768 N. Pennsylvania St. (20)

H

Habegger, Mrs. E. Dale.....3120 W. 51st St. (8)
Hadley, Mrs. David..5601 N. Pennsylvania St. (20)
Haggard, Mrs. Edmund B.
5914 N. Emerson Ave. (20)
Hagman, Mrs. N. A....4485 Marcy Lane #214 (5)
Hall, Mrs. Frank M..8633 N. Pennsylvania St. (40)
Hall, Mrs. Jack H.....6241 E. 43rd St. (26)
Hamilton, Mrs. H...3425 Green Hills Overlook (22)
Hampshire, Mrs. Donald R.
7979 Morningside Dr. (40)
Harcourt, Mrs. Allan K..5418 Allisonville Rd. (20)
Harding, Mrs. M. Richard..4220 Devon Court (18)
Harger, Mrs. Robert W...46 West 52nd Street (8)
Harold, Mrs. Norris E.....3545 N. Denny St. (18)
Harvey, Mrs. Verne K., Sr.
2601 Cold Springs Rd. (22)

Haslinger, Mrs. Clarence J. 5236 Boulevard Pl. (8)
Hatfield, Mrs. Nicholas W. . . 5851 E. 54th Pl. (26)
Hawk, Mrs. James H. 400 E. 43rd St. (5)
Haymond, Mrs. Joseph L.
2745 Crescent Hill Lane (8)
Hays, Mrs. Everett L. 2607 Manker Ave. (3)
Healey, Mrs. Robert J. . 5559 Washington Blvd. (20)
Heimburger, Mrs. Robert F. . . 4462 Central Ave. (5)
Helmer, Mrs. O. M. 5015 N. Illinois St. (8)
Hendricks, Mrs. Fred A. . . 5867 N. New Jersey (20)
Henry, Mrs. R. S. 4367 Lincoln Rd. (8)
Hepburn, Mrs. Charles K.
7570 Morningside Dr. (40)
Heubi, Mrs. John E. 6904 N. Park Ave. (20)
Hickman, Mrs. Jack W.
4134 Sun Meadow Lane (8)
Hickman, Mrs. Walter F. . . . 5859 Gladden Dr. (20)
Hicks, Mrs. Murwyn L. . . . 5212 Channing Rd. (26)
Hilldrup, Mrs. Don G. 5672 N. Illinois St. (8)
Hogan, Mrs. Michael A.
10102 North Carrollton (80)
Holland, Mrs. Wm. 4345 N. College Ave. (5)
Holmes, Mrs. George H., Jr.
5250 N. Capitol Ave. (27)
Holman, Mrs. Jerome E., Jr.
5930 Central Ave. (20)
Holman, Mrs. Jerome E., Sr.
4503 E. Kessler Blvd., E. Dr., (20)
Hood, Mrs. Ainslee A. . . . 1810 Rosedale Drive (27)
Howell, Mrs. Joseph D. 4514 E. 79th St. (50)
Howell, Mrs. Robert D.
6941 Washington Blvd. (20)
Hoyt, Mrs. Millard L. . . 5725 Hunterglen Rd. (26)
Hubbard, Mrs. J. D. 4330 Black Oak Dr. (8)
Hudson, Mrs. Foster J. . . . 3865 Cheviot Pl. (18)
Hull, Mrs. Ronald H. 6252 Bramshaw Rd. (20)
Hurteau, Mrs. William W. . . 201 West 75th St. (60)
Huse, Mrs. Wm. Murray
5131 N. Pennsylvania St. (5)

I-J

Irvine, Mrs. William O. 2609 W. 62nd St. (68)
Irwin, Mrs. Glenn W., Jr. . 8025 N. Illinois St. (60)
Iske, Mrs. Paul G. 5207 Central (20)
Jaquith, Mrs. Orville S. . . . 261 Blue Ridge Rd. (8)
Jennings, Mrs. Frank L.
2601 Cold Springs Rd. (22)
Jewett, Mrs. Joe H. 5803 Sherman Ave. (20)
Jinks, Mrs. Clifford H. 1831 E. 61st St. (20)
Johnson, Mrs. Thomas W.
5735 Washington Blvd. (20)
Jones, Mrs. Allen W.
6420 Around the Hills Rd. (26)
Jones, Mrs. David E. . 5433 Hawthorne Dr. (26)
Jones, Mrs. George . . 8933 Southeastern Ave. (19)
Joseph, Mrs. Rex M. 620 Hickory Lane (27)
Jowitt, Mrs. Richard H.
5390 Brendonridge Rd. (26)

K

Kalsbeck, Mrs. John E. 6115 W. 25th St. (24)
Kammen, Mrs. Leo 7030 Central Ave. (20)
Karsell, Mrs. Wm. A. . . . 5310 Staughton Dr. (26)
Katterjohn, Mrs. James C. . 9035 Pickwick Dr. (60)
Keenan, Mrs. George . . 2015 E. Thompson Rd. (27)
Keenan, Mrs. Reid L. 3702 N. Delaware St. (5)
Keever, Mrs. Charles H., Sr.
9016 Keever Dr., R. R. 18, Box 289B (24)
Kelly, Mrs. Walter F.
6845 E. Pleasant Run Pkwy., S. Dr. (19)
Kennedy, Mrs. Hunter F. . . 6411 Breamore Rd. (20)
Kennedy, Mrs. Joseph T.
5316 Brendonridge Rd. (26)
Kenney, Mrs. David B. 6711 E. Tenth St. (19)
Kenzler, Mrs. Jack I. 6040 E. 65th Place (20)
Kerr, Mrs. Harry R. . . 5774 Washington Blvd. (20)
King, Mrs. Harold K. . . 4606 Washington Blvd. (5)
Kingsbury, Mrs. John K. . 5776 E. Michigan St. (19)
Kirtley, Mrs. William R. . . . 7447 N. Park Ave. (20)
Kiser, Mrs. Edgar F. 5610 Central Ave. (20)
Kissel, Mrs. Wesley A. . . 3721 Briarwood Dr. (20)
Klain, Mrs. Benjamin V.
8419 N. Pennsylvania St. (20)
Knowles, Mrs. Charles Y. . . 4340 Glencairn Ln. (18)
Kohlstaedt, Mrs. Kenneth G. . . 645 E. 80th St. (40)
Kooiker, Mrs. John E. 3540 Watson Road (5)
Koons, Mrs. Karl M. . 5767 N. Pennsylvania St. (20)
Kornafel, Mrs. Laddie H. . . . 6201 College Ave. (20)
Kuntz, Mrs. Herman W.
2065 Lick Creek Drive (3)
Kwitny, Mrs. I. J. 5774 Broadway Terrace (20)

L

LaDine, Mrs. Clarence B. . . . 5417 N. Meridian (8)
Lamb, Mrs. Emmett B. . . . 1180 Golden Hill Dr. (8)
Lamb, Mrs. Russell W. . . . 4636 N. Capitol Ave. (8)
Lamber, Mrs. Chet . . 6107 N. Meridian, W. Dr. (20)
Leasure, Mrs. J. Kent 3060 N. Meridian (8)
Leff, Mrs. Abe H. 160 Pennridge Dr. (20)
Leffler, Mrs. William T. 250 E. 70th St. (20)
LeMaster, Mrs. Theodore R.
2621 McLeay Dr. (20)
Levi, Mrs. Leon. 6902 N. Pennsylvania St. (20)
Lewis, Mrs. Robert J. 5800 Lawrence Dr. (26)
Lichtenberg, Mrs. Melvin
5677 N. Meridian St. (8)
Lindenborg, Mrs. Paul G. 4304 E. 46th St. (26)
Lingeman, Mrs. Raleigh E.
4235 N. Pennsylvania (8)
Lochry, Mrs. Ralph L.
5801 N. Olney St., Apt. 9 (20)
Loehr, Mrs. Wm. M. . . 1426 E. Kessler Blvd. (20)
Lord, Mrs. Glenn C. 7437 Holliday Dr. W (60)
Louden, Mrs. Robert W. 1510 Marion Dr. (40)
Loudermilk, Mrs. R. G. 5607 Dunk Dr. (24)
Loughlin, Mrs. Leo . 5616 N. Pennsylvania St. (20)
Love, Mrs. George N. . 5331 Washington Blvd. (20)
Lozow, Mrs. David. 5545 N. Meridian (8)
Lukemeyer, Mrs. George T.
3845 N. Campbell Ave. (26)
Lunsford, Mrs. Thomas E. 4714 W. 30th (24)
Lurie, Mrs. Paul R. 5 W. 79th St. (60)
Luros, Mrs. J. Theodore 156 Fairway Dr. (60)
Lybrook, Mrs. William B.
4585 Kessler Blvd., E. Dr. (20)
Lynn, Mrs. Gene 504 E. 48th St. (5)

M

McAlpine, Mrs. Richard J. . 5110 Radnor Rd. (26)
McBride, Mrs. James 720 E. 80th (20)
McCallum, Mrs. Robert N.
1922 N. Capitol Ave., #6 (2)
McCartney, Mrs. Donald H. . . 410 East 56th St. (20)
McClain, Mrs. Edwin S.
550 W. 77th St., N. Dr. (20)
McCormick, Mrs. Charles O., Jr.
4240 Glencairn Lane (18)
McGrath, Mrs. Michael F.
6183 Washington Blvd. (20)
McLaren, Mrs. Daniel E. 4479 Barnor Dr. (26)
McQuiston, Mrs. Ralph J. . . 6120 Lawrence Dr. (26)
McTurnan, Mrs. Robert W. . . 6967 Central Ave. (20)
Mackey, Mrs. John E. 940 W. 58th St. (8)
Madden, Mrs. Robert J. 1420 Audubon Rd. (19)
Malcolm, Mrs. R. L., Jr. . . R. R. 17, Box 580B (23)
Manders, Mrs. Karl L. 215 E. 71st Street (20)
Manion, Mrs. Marlow W.
5132 N. New Jersey St. (5)
Manning, Mrs. Randolph
5320 N. Delaware St. (20)
Manzie, Mrs. Michael. 2687 W. 44th St. (8)
Marshall, Mrs. Albert L., Jr.
7802 Allisonville Rd. (20)
Martin, Mrs. Loren H. . 5338 Washington Blvd. (20)
Martz, Mrs. Carl D. 7926 Hawthorn Ct. (26)
Masters, Mrs. John M. 34 E. 46th St. (5)
Masters, Mrs. Robert 330 W. 106th (90)
Matthew, Mrs. W. Burleigh
800 W. Kessler Blvd. (8)
Matthews, Mrs. B. J. 966 North Graham (19)

Matthews, Mrs. William M.
1122 N. Bolton Ave. (19)
Maxam, Mrs. Beverly T.....6220 Sunset Lane (24)
Megenhardt, Mrs. Dennis S.
3038 E. Fall Creek Blvd. (5)
Meiks, Mrs. Lyman T.
4203 N. Pennsylvania St. (5)
Melin, Mrs. John R.....4904 Olympia Dr. (8)
Mericle, Mrs. Earl W.
8455 Washington Blvd. (20)
Merrell, Mrs. Paul.....5367 Kenwood (8)
Mertz, Mrs. John H. O.....5950 Central Ave. (20)
Michael, Mrs. Isaac E..3366 N. Kessler Blvd. (22)
Miller, Mrs. Jerry....7237 Sylvan Ridge Rd. (40)
Miller, Mrs. John D.....6255 Sunnyside Rd. (26)
Miller, Mrs. Roscoe E.....R. R. #17, Box 503 (23)
Mitchell, Mrs. Earl N..1222 N. Irvington Ave. (19)
Moak, Mrs. Glenn D.....2155 Weslynn Dr. (8)
Molt, Mrs. William F.....4618 N. Lesley Ave. (26)
Montgomery, Mrs. Ralph F...3531 N. Norfolk (24)
Montgomery, Mrs. W. Foster...4546 Park Ave. (5)
Moore, Mrs. Donald F...1315 West 10th Street (7)
Moore, Mrs. Harold T....5802 Allisonville Rd. (20)
Morchan, Mrs. Samuel.....7007 Broadway (20)
Moriarity, Mrs. John.....6130 Smock Dr. (27)
Morrison, Mrs. Lewis E., II....4450 Park Ave. (5)
Morton, Mrs. Joseph L.....3222 W. 42nd St. (8)
Morton, Mrs. Walter P.
3434 E. Fall Creek Blvd., N. Dr. (5)
Moss, Mrs. H. C.....4802 Washington Blvd. (5)
Mothersill, Mrs. Mark H.....3650 College Ave. (5)
Mouser, Mrs. Robert W.
5555 N. Meridian St. (8)
Muller, Mrs. Lullus P..5675 Washington Blvd. (20)

N

Nagan, Mrs. Robert F.....3902 Devon Dr. (18)
Nay, Mrs. Richard M.....5525 N. Meridian (8)
Need, Mrs. Louis T.....3627 Bluff Rd. (27)
Nester, Miss Lena Laura
5324 N. Pennsylvania St. (20)
Nie, Mrs. Louis W.....4305 Central Ave. (5)
Nohl, Mrs. John M.....5410 Eastridge Dr. (19)
Nolting, Mrs. Henry F....155 W. Hampton Dr. (8)
Norris, Mrs. Max S.....540 E. 36th (5)
Nourse, Mrs. Myron H..8064 Morningside Dr. (20)
Nugent, Mrs. Edwin J...6840 N. Delaware St. (20)
Nurnberger, Mrs. John I.
5215 Washington Blvd. (20)

O

O'Brian, Mrs. Earl J.
4525 Crooked Creek Ridge Rd. (8)
Offutt, Mrs. Andrew C...750 N. Campbell Ave. (19)
Olvey, Mrs. Ottis N.....5428 Central Ave. (20)
Otten, Mrs. Claude F...5222 Washington Blvd. (20)
Overley, Mrs. Toner.....3501 Watson Rd. (5)
Owens, Mrs. Tracy C.....2823 N. Meridian St. (8)

P

Pandolfo, Mrs. Harry....529 Markwood Ave. (27)
Parr, Mrs. Robert L.....4407 Dickson Rd. (20)
Patton, Mrs. Martin T.
3060 N. Meridian, Apt. 504 (8)
Paulissen, Mrs. George T.....741 Markwood (27)
Paynter, Mrs. Morris B.....115 Roberts Rd. (27)
Peck, Mrs. Franklin B., Jr.
8181 Lincoln Blvd. (20)
Peirce, Mrs. James D..5027 Washington Blvd. (20)
Pennington, Mrs. Walter E.
5727 Broadway Tr. (20)
Permer, Mrs. Erwin.....5590 Grandview Dr. (8)
Peters, Mrs. Robert J. D..3230 E. Michigan St. (1)
Pfaff, Mrs. O. G.....4605 N. Meridian St. (8)
Phillips, Mrs. David L.....5420 N. Meridian (8)
Pickett, Mrs. Robert D....4713 Millersville Rd. (5)
Pierce, Mrs. Emmett.....223 E. 24th St. (5)
Pilcher, Mrs. Jack E.....4601 Graceland Ave. (8)
Pittman, Mrs. John N...5001 N. Kenwood Ave. (8)
Pontius, Mrs. Edwin G.
6221 Avalon Lane, E. Dr. (20)
Popplewell, Mrs. Arvine G.
141 E. Southport Rd. (27)
Price, Mrs. Francis W.
550 East Edgewood Ave. (27)
Pryor, Mrs. Richard C...6134 Carrollton Ave. (20)

R

Raber, Mrs. Robert M.....265 Williams Ct. (20)
Rader, Mrs. George S.....3778 E. 62nd St. (20)
Rafalski, Mrs. Thomas A.
3135 Shady Grove Court (22)
Ragan, Mrs. William D.....2157 Wilshire Road (8)
Ramsey, Mrs. Frank B.....1401 W. 52nd St. (8)
Reed, Miss Ann.....4131 N. Meridian (8)
Reed, Mrs. Philip B.....4131 N. Meridian St. (8)
Rees, Mrs. Russel C.
926 Ellenberger Pkwy., W. Dr. (19)
Reid, Mrs. Charles A.....6506 Madison Ave. (27)
Rhamy, Mrs. Robert K.....2806 E. 65th St. (20)
Rice, Mrs. Frederic A., Jr.....5802 E. 46th St. (26)
Rice, Mrs. Raymond M.
7799 E. Holliday Drive (20)
Ridolfo, Mrs. Anthony S.....6139 Maren Dr. (24)
Robb, Mrs. John A....5151 N. Pennsylvania St. (5)
Rochlin, Mrs. I.....5005 Kenwood (8)
Roesch, Mrs. Ryland.....5444 N. Illinois (8)
Rogers, Mrs. Donald L..2618 Bluffwood Dr., W. (8)
Roll, Mrs. John W.....6340 Bramshaw (26)
Roller, Mrs. Charles W.....2301 Garfield Dr. (3)
Romberger, Mrs. Floyd T., Jr...10 W. 64th St. (20)
Rosenak, Mrs. Bernard D.
5254 N. Delaware St. (20)
Ross, Mrs. Alexander T...6050 Knyghton Rd. (20)
Ruddell, Mrs. Karl R.....2626 N. Meridian St. (8)
Ruddell, Mrs. Keith R...1201 Golden Hill Drive (8)
Rudesill, Mrs. Robert L.....5252 N. Capitol (8)
Rupel, Mrs. Ernest.....5735 N. Meridian (8)
Rust, Mrs. Byron K...8401 Washington Blvd. (40)
Rust, Mrs. Roland B., Jr.....6640 Sunny Lane (20)
Ruth, Mrs. Martin L.....7 N. Colorado Dr. (1)
Ryan, Mrs. Glen V.
3168 E. Fall Creek Pkwy., N. Dr. (5)

S

Sage, Mrs. Russell A...7531 Morningside Dr. (40)
Salb, Mrs. Max C.....6741 Allisonville Rd. (44)
Schechter, Mrs. John S.....2560 E. 91 St. (20)
Schlaegel, Mrs. T. F.....4536 Dickson Rd. (26)
Schlegel, Mrs. Donald M.....4042 Cranbrook (40)
Schmidt, Mrs. Loren F...5880 Carrollton Ave. (20)
Schmolhausen, Mrs. A. W...5009 Dickson Rd. (26)
Schmoyer, Mrs. M. Ray..7338 N. Audubon Rd. (20)
Schneider, Mrs. Carl J..... 340 N. Kenyon (19)
Schnute, Mrs. Richard..5460 Broadmoor Plaza (8)
Schuchman, Mrs. Gabriel...5944 Central Ave. (20)
Schuster, Mrs. Dwight..4503 Washington Blvd. (5)
Scofield, Mrs. John B.....9014 Pickwick (60)
Scott, Mrs. George E.....4110 Roland Rd. (18)
Scott, Mrs. Jasper P.....5840 Winthrop Ave. (20)
Scott, Mrs. John R.....7966 N. Illinois St. (20)
Scott, Mrs. Robert P...5715 N. Pennsylvania (20)
Seaman, Mrs. Charles F...5353 Channing Rd. (20)
Sedam, Mrs. Herbert L...4819 Millersville Rd. (26)
Sellmer, Mrs. George.....8760 Driftwood (40)
Sexson, Mrs. Hiram T.....5455 N. Meridian St. (8)
Shafer, Mrs. Marion R...6290 Allisonville Rd. (20)
Shapiro, Mrs. Burton J...525 Woodmere Dr. (20)
Shelley, Mrs. R. J.....5810 E. 46th St. (26)
Shipley, Mrs. Edward.....3601 Marrison Pl. (5)
Shullenberger, Mrs. Wendell A.
4535 Central Ave. (5)
Shumacker, Mrs. Harris B., Jr.
4330 Central Ave. (5)

Sicks, Mrs. Okla W.....607 E. 82nd (40)
Siderys, Mrs. Harry.5102 N. Pennsylvania St. (20)
Siersdorfer, Mrs. T. N.....5559 W. Morris St. (41)
Siebe, Mrs. Jack C.....4903 Cavendish Rd. (20)
Sigmond, Mrs. Harvey..3245 N. Pennsylvania (5)
Silver, Mrs. Richard A...7421 E. Frederick Dr. (8)
Sims, Mrs. J. Lawrence.....3723 N. Gale St. (18)
Sluss, Mrs. David.....3657 Washington Blvd. (5)
Smith, Mrs. E. Rogers.....160 W. 47th St. (8)
Smith, Mrs. Roy Lee..1427 West Stop 11 Rd. (27)
Snider, Mrs. Byron.....2717 S. East St. (3)
Solomon, Mrs. Reuben A.
5330 N. Pennsylvania (20)
Sovine, Mrs. Joe W.....8182 N. Illinois St. (20)
Spahr, Mrs. John F., Jr.
3014 Green Hills Lane, N. Dr. (22)
Sparks, Mrs. Alan L. 5466 N. Pennsylvania St. (20)
Spears, Mrs. John M.....6910 Shelby (27)
Speckman, Mrs. Glenn H.....5242 Park Ave. (20)
Spivey, Mrs. Russell 5590 W. 79th (68)
Sputh, Mrs. Carl B., Jr.
5671 Rolling Ridge Rd. (20)
Stansbury, Mrs. Wm. E.....5610 E. 16th St. (18)
Stayton, Mrs. Chester A., Sr. 6931 Central (20)
Stayton, Mrs. Chester A., Jr.
7065 Central Ave. (20)
Stephens, Mrs. Donald E.....5555 Broadway (20)
Stephens, Mrs. Kuhrman H.
5210 Boy Scout Rd. (26)
Stoelting, Mrs. Vergil K....4706 Laurel Circle (26)
Stone, Mrs. Alvin T.....5727 Broadway (20)
Storey, Mrs. D. Edmund
808 Forest Blvd., N. Dr. (20)
Strang, Mrs. Wm. C.....7760 Cree Trail (50)
Stroup, Mrs. Tyler J...5758 N. College Ave. (20)
Stucky, Mrs. Elsworth K.
4528 N. Meridian St. (8)
Stump, Mrs. Loyd K.....4250 Kessler Lane (20)
Suelzer, Mrs. John.....4041 Milbourne St. (8)
Sullivan, Mrs. James J.....3458 Welch Dr. (24)
Sutton, Mrs. William E....5670 Guilford Ave. (20)
Swan, Mrs. John R.....320 Arden Dr. (20)
Symmes, Mrs. Alfred T. 6445 N. Illinois (20)

T

Talbott, Mrs. Dan E.....6470 N. Michigan Rd. (8)
Tanner, Mrs. Henry S.
4461 N. Pennsylvania St. (5)
Taube, Mrs. Jack....4352 N. Pennsylvania St. (5)
Taylor, Mrs. Clifford C.
3720 Briarwood Dr., E. (20)
Taylor, Mrs. Cyril.....4746 Jennys Rd. (8)
Taylor, Mrs. Frederic W.....40 E. 43rd St. (5)
Teague, Mrs. Frank W.....555 W. Pine Dr. (60)
Tharpe, Mrs. Ray G.....6161 Sunset Lane (8)
Thatcher, Mrs. Hugh K., Jr.....408 E. 45th St. (5)
Thoman, Mrs. Rex L.....1906 N. Capitol Ave. (2)
Thomas, Mrs. Charles R.....R. R. 5, Box 456A (3)
Thomas, Mrs. Fred A.....5827 Broadway (20)
Thomas, Mrs. Lowell I.....28 W. Hampton Dr. (8)
Thomas, Mrs. Morris E..6215 Spring Mill Rd. (20)
Thompson, Mrs. John V.....7899 Ridge Rd. (20)
Thompson, Mrs. Paul D.
5939 Hillside Ave., E. Dr. (20)
Thompson, Mrs. Wayne...6365 Knyghton Rd. (20)
Thornburg, Mrs. Kenneth E....7306 N. Chester (5)
Thurston, Mrs. A. L.....4078 Central Ave. (5)
Tinsley, Mrs. Walter B., Sr...5638 Broadway(20)
Tinsley, Mrs. Walter B., Jr.
4505 Melbourne Rd. (8)
Tischer, Mrs. E. Paul.....6801 Dean Rd. (20)
Tondra, Mrs. John M.....4511 Broadway (5)
Torrella, Mrs. Jose A.....5721 W. 18th St. (24)
Trusler, Mrs. Harold M.
6150 N. Meridian St. (20)
Tuchman, Mrs. Joseph H.
8515 Spring View Dr. (20)
Tucker, Mrs. Warren S.
5338 N. Pennsylvania St. (20)
Tyler, Mrs. Edward.....5693 N. Meridian (8)

U-V

Ullom, Mrs. Ralph.....520 Wayside Dr. (60)
Van Denbark, Mrs. Howard..3268 Patton Dr. (24)
Vandivier, Mrs. Robert M.
3715 N. Meridian St. #1 (8)
Van Meter, Mrs. C. Powell
4102 Marrison Place (18)
VanOsdol, Mrs. Harry A...43 W. Hampton Dr. (8)
Van Tassel, Mrs. C. J., Jr.
5842 Washington Blvd. (20)
Vollrath, Mrs. Victor J.
7980 N. Pennsylvania St. (20)
Von Der Haar, Mrs. Gerard
1109 N. Mitchner St. (19)
Vore, Mrs. Robert E.....3710 Cheviot Place (5)

W

Wainscott, Mrs. Clinton S.
5332 Channing Road (26)
Waldo, Mrs. J. Thayer.....420 W. 64th St. (8)
Walther, Mrs. Joseph E.
4266 N. Pennsylvania St. (5)
Walton, Mrs. William M..5242 Boulevard Place (8)
Warneke, Mrs. Charles.....2533 Ryan Dr. (20)
Warriner, Mrs. James B....990 N. Bolton Ave. (19)
Warvel, Mrs. John H.
4360 Kessler Blvd., N. Dr. (8)
Weiss, Mrs. Jason.....2790 W. 38th (8)
West, Mrs. Joseph L.....2110 W. 38th St. (8)
Westfall, Mrs. B. Kemper, Jr.
4001 N. Meridian St. (8)
Wheeler, Mrs. David E.
5441 Brendonridge Rd. (26)
White, Mrs. Donald J...5430 N. Delaware St. (20)
White, Mrs. Douglas H., Jr.
7405 Frederick Dr. East (60)
White, Mrs. John B.....5850 Highfall Rd. (26)
White, Mrs. Philip T.....5780 White Oak Ct. (20)
Wilkens, Mrs. Irvin W.
4820 E. Pleasant Run Pkwy., N. Dr. (1)
Williams, Mrs. Charles D.....160 E. 71st St. (20)
Williams, Mrs. Howard S., Jr.
3824 N. Delaware (5)
Wirey, Mrs. Harold R. ...2949 E. Hanna Ave. (27)
Wise, Mrs. William R.....1908 Orlando (8)
Wishard, Mrs. William N., Jr.
5720 N. Pennsylvania St. (20)
Witham, Mrs. Robert L.....5811 Ravine Rd. (20)
Woerner, Mrs. Thos. E...7981 Dartmouth Rd. (60)
Wolfram, Mrs. Don J.
5716 N. Pennsylvania St. (20)
Woolling, Mrs. Kenneth R...5751 Central Ave. (20)
Worley, Mrs. J. P.....6797 E. 10th (19)
Worley, Mrs. R. H.....3705 N. Denny (18)
Wrege, Mrs. Malcolm....5411 Shorewood Dr. (20)
Wright, Mrs. J. Wm., Jr.....4220 Knollton Rd. (8)
Wyttenbach, Mrs. John E.
5509 Kenwood Ave. (8)

Y-Z

Yacko, Mrs. Michael L..5341 N. Channing Rd. (26)
Young, Mrs. James W.....440 E. 71st St. (20)
Young, Mrs. John M. 4535 Marcy Lane, No. 261 (5)
Zell, Mrs. Evertson H....4747 Millersville Rd. (26)
Zerfas, Mrs. Charles P. A.....R. 1, Box 220 (27)

Dill, Mrs. Charles W.
4111 S. Sherman Dr., Beech Grove
Kendrick, Mrs. William M. R. R. #1, Mooresville
Cuthbert, Mrs. Marvin P...R. R. 2, Box 386, Carmel
Hasewinkle, Mrs. Carroll W.
R. R. 2, Box 354, Carmel
Myers, Mrs. Roy V.
7710 Beta Circle, W. Palm Beach, Fla.
Nolin, Mrs. Richard T...R. R. 2, Box 323D, Carmel

Wilson, Mrs. Oliver R.
Box 259, R. R. 2, Morgantown
Ramage, Mrs. Walter F.
244 S. First St., Beech Grove
Link, Mrs. Goethe.....R. 6, Box 152, Martinsville
Gaddy, Mrs. Euclid T.....R. 2, Box 179, Plainfield

MARSHALL COUNTY

Hampton, Mrs. James N.....R. R. 2, Argos
Bowen, Mrs. Otis R.....304 N. Center St., Bremen
Burket, Mrs. Cecil R.....121 E. Grant St., Bremen
Stine, Mrs. Marshall..420 Shumaker Dr., Bremen
Hippensteel, Mrs. Russell R.
936 South Shore Rd., Culver
Howard, Mrs. Joseph.....212 Cass St., Culver
Norris, Mrs. Ernest B...2805 E. Shore Dr., Culver
Vore, Mrs. L. W.....R. R. 4, Myers Lake

Plymouth

Coursey, Mrs. James.....R. R. 2, Box 282A
France, Mrs. Lloyd C.....R. R. 2, Goshen Rd.
Guild, Mrs. Kent.....800 N. Center St.
Peterson, Mrs. Ronald.....R. R. 2
Reed, Mrs. Robert G.....235 Hogarth
Reno, Mrs. Edward.....700 Ferndale
Rimel, Mrs. James F.....909 Bayless
Robertson, Mrs. James S.....1081 Highland Ct.

MIAMI COUNTY

Shrock, Mrs. E. E......**Amboy**
Line, Mrs. Homer.....Chili
Rendel, Mrs. H. E......**Mexico**

Peru

Barnett, Mrs. Helen.....109 W. Seventh St.
Guthrie, Mrs. James U.....331 W. 3rd St.
Herd, Mrs. Cloyn R.....16 Farview
Hill, Mrs. Lloyd L.....169 West Blvd.
Johnson, Mrs. Owen B.....106 W. 6th St.
Malouf, Mrs. S. D.....359 W. Third St.
Snyder, Mrs. Parker W.....159 W. 6th St.
Wildman, Mrs. R. E.....R. R. 2
Yarling, Mrs. Francis.....117 E. Fifth St.

MONTGOMERY COUNTY

Crawfordsville

Baird, Mrs. Keith.....811 W. Main
Burks, Mrs. Jess E.....512 W. Wabash Ave.
Cooksey, Mrs. Thomas L.....205 Marshall
Daugherty, Mrs. Fred N.....415 W. Main St.
Eggers, Mrs. Richard R.....203 West St.
Haller, Mrs. Thomas C.....508 W. Main St.
Humphreys, Mrs. John W.....1309 Durham Dr.
Kinnaman, Mrs. Howard.....R. R. 5
Kirtley, Mrs. James M.....615 Thornwood Rd.
Lingeman, Mrs. Byron N.....203 Wallace Ave.
Millis, Mrs. Robert J.....408 S. Grant Ave.
Millis, Mrs. Samuel C.....201 Wallace Ave.
Peacock, Mrs. Norman F.....111 Wallace Ave.
Pierson, Mrs. Robert H.....305 E. Main
Richards, Mrs. Edgar E.....Danville Rd., R. R.
Shannon, Mrs. Wesley E.....6 Locust Hill Dr.
Sharp, Mrs. John L.....1113 Durham Dr.
Viray, Mrs. V. G.....809 North Dr.
Wallace, Mrs. Hawthorne C.....107 W. Jefferson

Otten, Mrs. Ralph R.....Darlington
Smith, Mrs. Byron J.....Kingman
Blix, Mrs. Fred.....Ladoga
Davis, Mrs. William H.....New Market
Kindell, Mrs. Hurschell D.....New Richmond
Rusk, Mrs. Hubert M.....Box 36, Wallace
Parker, Mrs. Carl B.....Wingate

MORGAN COUNTY

Martinsville

Eisenberg, Mrs. David.....Sunnyside Dr.
Gray, Mrs. Leon.....260 N. Ohio
Miller, Mrs. Ray D.....290 E. Washington
Miller, Mrs. Robert J.....589 S. Jefferson St.
Ostheimer, Mrs. George J...215 E. Washington St.
Pitkin, Mrs. Edward.....309 E. Washington
Pitkin, Mrs. McKendree C.....440 E. Washington
Reese, Mrs. Jay S.....Old 67 Rd.
Sweet, Mrs. Austin.....260 N. Wayne
Van Wienan, Mrs. John.....439 N. Jefferson
Willan, Mrs. Horace R.....109 S. Jefferson
Winter, Mrs. William.....269 E. Green

Mooresville

Bivin, Mrs. James H.....N. Indiana Rd.
Comer, Mrs. Charles W.....R. R. 2
Comer, Mrs. Kenneth E.....R. R. 2
Kendrick, Mrs. William M....R. R. 1, Carousel Hill
Van Bokkelen, Mrs. Robert W...124 S. Indiana St.

Murphy, Mrs. M. G.....R. R. 2, Morgantown
Wilson, Mrs. Oliver R.....R. R. 2, Morgantown

NOBLE-LaGRANGE COUNTIES

(Newly-Organized)

(Members are listed alphabetically without regard to town of residence.)

Benedict, Mrs. Charles D.....R.R. #1, LaGrange
Bowman, Mrs. Charles M...202 E. Main St., Albion
Hooker, Mrs. Donald J...406 S. Main St., Ligonier
Luckey, Mrs. Robert C.....Box 125, Wolf Lake
Miller, Mrs. Jerry Allen
Woodring Dr., East LaGrange
Nash, Mrs. Justin R.....202 N. Orange, Albion
Seybert, Mrs. J. D....117 S. Riley St., Kendallville
Stone, Mrs. Robert C.....501 S. Main St., Ligonier
Studebaker, Mrs. Lloyd R.
325 W. Spring, LaGrange
Stultz, Mrs. Quentin F...3 Hawthorn Dr., Ligonier
Taylor, Mrs. Millard R.....Howe
Williams, Mrs. H. O.
735 Mitchell St., Kendallville
Williams, Mrs. John H.
221 Van Buren, Shipshewana
Yunker, Mrs. Philip.....Box 188, Howe

OWEN-MONROE COUNTIES

Bloomington

Austin, Mrs. D. C.....114 S. Grant
Baxter, Mrs. Neal E.....515 Hawthorne
Bomba, Mrs. Brad.....150 Sunny Slopes
Borland, Mrs. Raymond M.....Moores Pike
Buck, Mrs. Roger L.....2016 Vine
Buckingham, Mrs. Richard E.....705 S. Fess
Byrne, Mrs. Louis.....Cameron St.
Creek, Mrs. Jean A.....2303 Fritz Dr.
Demotte, Mrs. Russell.....904 S. Rose
Egolf, Mrs. Charles F.
Campusview House-North 262
Emery, Mrs. Charles B., Jr.....1316 S. High St.
Estes, Mrs. Ambrose.....701 Highland St.
Fowler, Mrs. R. Ross.....Pleasant Ridge Rd.
Geiger, Mrs. Dillon.....1704 N. Fee Lane
Hardtke, Mrs. Eldred F.....1400 Pickwick Place
Hepner, Mrs. H. S.....302 E. 7th St.
Holland, Mrs. Deward J.....1100 Atwater
Holland, Mrs. Philip T.....1001 S. Jordan
Houshmand, Mrs. Cyrus.....102 N. Glenwood Dr.
Hrisomalos, Mrs. Frank.....505 E. Kirkwood St.
Lundblad, Mrs. Wilfred M.....1880 Covenanter Dr.
Manifold, Mrs. Harold M.....1310 Nancy
Marchant, Mrs. Clarence H.....350 S. College
McIntire, Mrs. Clarence R.....2424 N. Dunn Rd.
Middleton, Mrs. Thomas O.....210 Gilbert Ave.

Milan, Mrs. Joseph F. 618 Eastside Dr.
Miller, Mrs. John M. 1210 E. Wylie
Poolitsan, Mrs. George 1217 E. First St.
Reed, Mrs. William C. 1215 Atwater Ave
Rieger, Mrs. I. Taylor Woodcrest Dr.
Rogers, Mrs. Otto F. 804 E. Eighth St.
Rollins, Mrs. Thomas K. 815 S. Rose Ave.
Schell, Mrs. H. Richard 1401 Maxwell
Seagle, Mrs. W. Courtney 1710 N. Walnut
Sibbitt, Mrs. Joseph W. 818 Sheridan
Smith, Mrs. Hershel S. 200 Glendora Dr.
Stangle, Mrs. William J. 2305 E. 2nd St.
Syler, Mrs. Robert W. 801 Mitchell
Taraba, Mrs. Ralph 211 E. Martha Ave.
Topolgus, Mrs. James N. 1015 Atwater Ave.
Tyler, Mrs. Stanley 1419 Nancy St.
Wilson, Mrs. Talmage L. Bender Rd.
Winters, Mrs. Matthew Maxwell Terrace Apts.

Stouder, Mrs. C. E. Ellettsville

PARKE-VERMILLION COUNTIES

Clinton

DeRenne, Mrs. Wm. L. 457 Mulberry
Evans, Mrs. F. J. 1315 S. Main St.
Gailey, Mrs. I. L. 235 Blackman
Gerrish, Mrs. W. D. 125 S. 5th St.
Herzberg, Mrs. Milton 545 S. Fourth St.
Kercheval, Mrs. J. M. 452 S. 5th
Somerville, Mrs. John W. P. O. Box 264

Goodrum, Mrs. W. R. Cayuga
Webb, Mrs. L. C. Dana
Britton, Mrs. W. D. Bloomingdale Rd., Montezuma

Rockville

Beebe, Mrs. Milton O., Jr. 9 Valley Dr.
Bloomer, Mrs. Joseph R. 115 N. Market
Bloomer, Mrs. R. S. 502 W. York St.
Kempf, Mrs. Gerald F. Indiana State Hospital for Chest Diseases
Minich, Mrs. Wm. G. 617 Woodland Dr.

PERRY-SPENCER COUNTIES

Bush, Mrs. Hargis R. Sixth St., Cannelton
Gilbert, Mrs. Robert 411 E. 7th, Cannelton
Glackman, Mrs. John C. 207 Center St., Rockport
Snyder, Mrs. Earl Troy
Smith, Mrs. Benjamin P. Hawesville, Ky.

Tell City

Dukes, Mrs. David A. 521 Main St.
Glenn, Mrs. Fred C. 436 Main St.
Herr, Mrs. William J. Boyd Road
James, Mrs. John Mark 24 11th St.
James, Mrs. Nicholas A. 740 Ninth St.
Kemker, Mrs. Bernard P. Tell Street Rd.
Lally, Mrs. Bernard 918 Main
Lashley, Mrs. Donald L. 606 Ninth St.
Lohoff, Mrs. Lewis C. 425 10th St.
Neifert, Mrs. Noel L. 1118 Blum St.
Smith, Mrs. Fred, Jr. 1407 12th Street

PORTER COUNTY

Chesterton

Griffin, Mrs. Joseph 419 S. Jackson
Hall, Mrs. Thomas 16 Ridge Dr., Dune Acres
Harless, Mrs. C. M. 123 W. Indiana Ave.
Read, Mrs. John E. Wilson St.
Robertson, Mrs. W. C. 600 E. Morgan

Valparaiso

Brown, Mrs. J. C. 1808 Napoleon
Davis, Mrs. Carl 202 Indiana
DeGrazia, Mrs. E. J. 410 Washington
Douglas, Mrs. George R. 404 Washington
Eades, Mrs. Ralph 203 Jefferson
Frank, Mrs. John R. 303 Indiana
Gold, Mrs. Marvin E. 1302 Napoleon
Klos, Mrs. Stanley J. R. R. 2, Box 286
LaRocca, Mrs. Joseph 402 Erie
Makovsky, Mrs. Theodore 1807 Beulah Vista Dr.
O'Neill, Mrs. Martin J. 301 Washington
Sacks, Mrs. Leonard Z. 563 Ravine Dr.
Seipel, Mrs. Herman O. 302 Lafayette
Vietzke, Mrs. Paul C. F. 102 Lafayette

PUTNAM COUNTY

Veach, Mrs. Richard L. Bainbridge
Gray, Mrs. Clyde C. Cloverdale
Ellett, Mrs. John D. Coatesville

Greencastle

Dettloff, Mrs. Frederick R. 300 Highfall Ave.
Johnson, Mrs. James B. 314 Highfall Ave.
Schauwecker, Mrs. Cleon M. 613 Ridge Ave.
Smith, Mrs. Wilson A. R. F. D. 2
Steele, Mrs. Dick J. 207 Northwood Blvd.
Stephens, Mrs. James P. R. R. 3
Tennis, Mrs. George T. 602 S. Jackson
Tipton, Mrs. William R. 103 Northwood Blvd.
Wiseman, Mrs. V. Earle 6 Durham Ave.

RANDOLPH COUNTY

Farmland

Nixon, Mrs. Byron 312 N. Main
White, Mrs. Harvey E. 200 S. Main

Shallenberger, Mrs. H. R. Modoc
Potter, Mrs. Richard M. 120 W. Walnut, Ridgeville

Union City

Chambers, Mrs. Carol R. 1000 N. Columbia
Chambers, Mrs. Leroy B. 800 N. Columbia
Landon, Mrs. David J. 623 N. Columbia St.
Phipps, Mrs. Leland K. 516 N. Howard
Reid, Mrs. Robert W. 706 W. Division
Wagoner, Mrs. B. D. 409 N. Columbia St.

Winchester

Dininger, Mrs. William S. 303 S. Main St.
Engle, Mrs. Russell B. R. R. 2
Painter, Mrs. Lowell W. 507 S. Main
Slick, Mrs. C. R. 512 S. Oak Street
Sparks, Mrs. Paul W. 601 W. Will

RUSH COUNTY

McNabb, Mrs. George B. Carthage
Worth, Mrs. C. Willard Milroy

Rushville

Atkins, Mrs. C. C. 410 N. Perkins
Corpe, Mrs. Kenneth F. R. R. 4
Deerhake, Mrs. William A. 501 N. Harrison
Denny, Mrs. Melvin R. R. #1
Ellis, Mrs. Davis W. 721 N. Perkins
Green, Mrs. Frank H. 516 N. Morgan
Hoover, Mrs. Eugene 501 N. Harrison
Johnson, Mrs. Robert 841 N. Harrison
McKee, Mrs. Harry S. R. R. 6
Norris, Mrs. Marvin 1107 N. Main St.
Shanks, Mrs. Roy E. 1110 N. Morgan
Smith, Mrs. Stephen D. 4 Maple Dr., Knightstown

SHELBY COUNTY

Nigh, Mrs. R. M. Fairland
Davis, Mrs. John A. Flat Rock

Shelbyville

Arata, Mrs. Lucian A. 327 W. Broadway
Dalton, Mrs. Wilson L. 1712 Culbertson
Gehres, Mrs. Robert W. 610 Shelby
Grove, Mrs. E. G. 242 W. Broadway
Inlow, Mrs. Herbert H. 212 N. Harrison
Inlow, Mrs. Paul M. 104 W. Washington
Inlow, Mrs. W. D. Spring Hill Rd.
McFadden, Miss Marian 28 W. Mechanic St.
McFadden, Mrs. Walter C. 28 W. Mechanic
Miller, Mrs. Richard C. 17 W. Mechanic
Moheban, Mrs. Joseph Spring Hill Rd.
Paz, Mrs. Luis 526 E. McKay Rd.
Phares, Miss Frances 408 S. Harrison
Richard, Mrs. Norman F. 541 Lockerbie Rd.
Scott, Mrs. Virgil B. R. R. 2, N. Riley Hwy.
Silbert, Mrs. David B. 1100 Fairfield Drive
Spindler, Mrs. Robert D. 165 W. Mechanic
Tindall, Mrs. Paul R. 164 W. Franklin
Tindall, Mrs. William R. 616 S. Harrison
Tower, Mrs. James H., Jr. 1018 S. West Street
Whitcomb, Mrs. Roger F. 218 W. Broadway

STARKE COUNTY

Leinbach, Mrs. Earl R. 206 Davis, Hamlet
DeNaut, Mrs. James F. 201 E. Lake St., Knox
Henry, Mrs. Howard J. R. R. 1, Knox
Ingwell, Mrs. Guy B. 402 E. Lake St., Knox
McClure, Mrs. Clark R. R. 1, Knox

ST. JOSEPH COUNTY

Mishawaka

Barone, Mrs. C. V. 59053 Bremen Highway
Ganser, Mrs. Richard A. 1020 Wilson Blvd.
Goethals, Mrs. Charles J. 602 Lincolnway W.
Macri, Mrs. Paul A. 116½ W. Third St.
McDonald, Mrs. R. M. 12252 E. Jefferson Road
Orr, Mrs. Robert 1335 Prospect Dr.
Reed, Mrs. Robert 903 Homewood
Rosenwasser, Mrs. Jacob 834 Lincolnway E.
Sirlin, Mrs. Edward M. 3636 Terry Lane
Spalding, Mrs. Wendell L. 60100 So. Fir Road
Stringer, Mrs. D. D. 1035 Lincoln Way E.
Templeton, Mrs. Ames R. 522 Calhoun St.
Walerko, Mrs. Frank M. 515 N. Clay St.
Walters, Mrs. Charles E. 16166 Ireland Rd.
Whitlock, Mrs. Francis C. 304 Lincoln Way E.
Whitlock, Mrs. Merle E. 16146 Chandler Blvd.
Wurster, Mrs. H. C. 221 E. Third St.
Zimmer, Mrs. Harry J. 333 Edgewater Dr.

Houser, Mrs. D. S.
24751 N. Riley Rd., North Liberty
Smith, Mrs. Lee 21620 Leeper Rd., Lakeville
Spenner, Mrs. Raymond W.
R. R. 3, Diamond Lake, Cassopolis, Mich.

South Bend

A

Acker, Mrs. Robert B. 103 S. Ironwood Dr.
Arisman, Mrs. R. K. 1615 E. Colfax Ave.

B

Backs, Mrs. Alton J. 1953 Inglewood Place
Bartsch, Mrs. Harvey L. 61397 S. Miami Rd.
Beach, Mrs. Norman 1903 Trent Way
Bebensee, Mrs. Donald 53263 Ironwood Dr.
Bechtold, Mrs. Samuel E. 313 Pendle St.
Bell, Mrs. H. D. 1357 Champeau St.
Bell, Mrs. R. L. 109 S. Ellsworth
Bennett, Mrs. Jene R. 1826 E. Jefferson Blvd.
Berke, Mrs. Robert D. 1420 E. Jefferson Blvd.
Biasini, Mrs. Ben A. 19585 Glendale Road
Bickel, Mrs. David A. 1335 E. Wayne St. N.
Birmingham, Mrs. P. J. 61490 Meadowlark Lane
Bixler, Mrs. Louis C. 1817 Portage Ave.
Bodnar, Mrs. Leslie M. 1843 Portage Ave.
Bogan, Mrs. Wm. C. 1512 Hass Dr.
Booth, Mrs. Franklin M. 531 Edgewater Dr.
Borough, Mrs. Lester D. 816 Woodside
Brechtl, Mrs. H. J. 2305 E. Washington
Buchanan, Mrs. Wallace D. 1326 E. Wayne St., N.
Buechner, Mrs. Fred W. 603 W. Marion St.
Buslee, Mrs. Roger M. 1331 E. South St.
Butts, Mrs. Milton A. 744 N. Jacobs St.

C

Carter, Mrs. F. R. N. 2000 E. Jefferson Blvd.
Cassady, Mrs. John R. 1805 Marquette Blvd.
Cassady, Mrs. J. Vernal 2216 E. Madison
Chamblee, Mrs. Roland W. 53287 Ironwood Rd.
Clark, Mrs. William H. 1227 Garland Rd.
Colip, Mrs. George D. 260 David St.
Cook, Mrs. Gordon C. 1620 Southwood Ave.
Custer, Mrs. Edward W. 52383 Laurel Road

D

Davis, Mrs. Edward A. 52820 Kenelworth Rd.
Denham, Mrs. Robert H., Jr. 1515 E. Colfax
DeVoe, Mrs. K. R. 52978 Highland Dr.
Dingley, Mrs. Albert F. 1976 Briar Way
Dodd, Mrs. Robert D. 1510 Tudor Lane
Dolezal, Mrs. Bernard J. 815 Park Ave.
Donnelly, Mrs. Everett F. 1246 E. Jefferson Blvd.
Dunlap, Mrs. D. Logan 123 W. North Shore Dr.

E

Eades, Mrs. R. Charles 232 Marquette Ave.
Ebin, Mrs. J. L. 1223 N. Lawrence St.
Edwards, Mrs. Bernard E. 1340 Garland Rd.
Egan, Mrs. Sherman L. 944 Riverside Dr.
Engel, Mrs. Howard R. 1112 S. 20th
English, Mrs. J. Paul 3116 Robinhood Lane
Ericksen, Mrs. L. G. 1212 E. Woodside
Erickson, Mrs. G. Walter 3012 Robinhood Lane

F

Feferman, Mrs. Martin E. 125 S. Esther St.
Feldman, Mrs. Max 1310 E. Fairview
Filipek, Mrs. Walter J. 2513 Lincoln Way West
Firestein, Mrs. Ben Z. 125 W. Marion Street
Firestein, Mrs. Ray 502 N. Ironwood Dr.
Fish, Mrs. Edson C. 19054 Summers Drive
Foley, Mrs. Hansel 1314 Leeper
Forrest, Mrs. O. Norman 52725 Arbor Dr.
Frank, Mrs. Herbert 2616 S. Twyckenham Dr.
Frank, Mrs. L. L. 534 N. Lafayette Blvd.
Frank, Mrs. L. L., Jr. 1750 N. Wilbur
Frash, Mrs. D. W. 1912 Miami Street
Frey, Mrs. William B. 1714 E. Bader

G

Gaffney, Mrs. Raymond 534 Peasway St.
Gates, Mrs. George E. 411 W. North Shore Dr.
Gilman, Mrs. Marcus M. 1925 E. Jefferson Blvd.
Godersky, Mrs. George E. 2744 Sampson St.
Goraczewski, Mrs. T. C. 1016 W. Washington
Graf, Mrs. John P. 53260 Placid Dr.
Green, Mrs. G. Richard 1515 E. Wayne St.
Green, Mrs. George F. 754 Country Club Lane
Green, Mrs. Norvel E. 1726 E. LaSalle Ave.
Grove, Mrs. James H. 60268 Mayflower Rd.

H

Hamilton, Mrs. Charles O.
1418 E. Washington Ave.
Haugseth, Mrs. Ellsworth K. 820 N. Ironwood
Hawkins, Mrs. Glen E. 17280 Parker Ave.
Helmer, Mrs. John 315 W. N. Shore Dr.
Hildebrand, Mrs. J. O. 1637 Southbrook Dr.
Hill, Mrs. Theodore 107 N. Eddy St.

Hill, Mrs. Wallace C.....248 S. Hawthorne
Holtzman, Mrs. Norman.....3322 Whitcomb
Hyde, Mrs. Carroll C.....1521 E. Colfax Ave.

J-K

Jankowski, Mrs. Ernest B...1246 S. Sheridan Ave.
Johns, Mrs. N. C.....1329 N. St. Joseph St.
Kamm, Mrs. Bernard A.....125 W. Marion St.
Karn, Mrs. John W.....1535 Wall St.
Krueger, Mrs. John E.....620 Peasway
Kuhn, Mrs. Frederick L.....1215 S. Michigan St.

L

Lamb, Mrs. J. Leonard..1321 E. Wayne St., South
Lane, Mrs. William H.....845 Park Ave.
Lang, Mrs. Joseph E.....505 Dixie Highway N.
Lester, Mrs. Vern L.....3536 Springbrook Dr.
Levatin, Mrs. Bernard I.....1814 E. Churchill Dr.
Levkoff, Mrs. Abner 3239 Essex Dr.
Lionberger, Mrs. John R...1419 E. Jefferson Blvd.
Liss, Mrs. Emanuel C.....1112 S. 20th St.
Lockhart, Mrs. Philip B.....1611 Wayne St. E.

M

MacDonell, Mrs. E. H.....1341 E. Colfax
MacLeod, Mrs. John K.....930 Simmon Ct.
Mahank, Mrs. Camiel C.....1804 E. Jefferson
Marquis, Mrs. Gordon.....329 Wakewa
Martinov, Mrs. William E.....1421 Wall St.
Mason, Mrs. Bernard A.....2719 Marine St.
Mauzy, Mrs. Merritt.....1740 Hass Dr.
McCraley, Mrs. William J.....1737 Belmont Ave.
McMeel, Mrs. James.....1138 Whitehall Dr.
Metcalfe, Mrs. Grant E.....1209 E. Wayne, No.
Miller, Mrs. Milo K.....1018 E. Oakside
Mott, Mrs. C. A.....2733 Lincolnway West
Mueller, Mrs. Hilbert M.....3525 Windingwood Dr.
Murphy, Mrs. Eugene C. ...1411 Sunnymede Ave.
Myers, Mrs. Philip R.....519 Harrison Ave.

N-O

Neher, Mrs. John L.....17371 Cleveland Rd.
Nelson, Mrs. Raymond E.....1909 E. Madison St.
Olson, Mrs. Donald T.....127 S. Ellsworth Pl.
Olson, Mrs. Kenneth L.....1228 E. Woodside Ave.
Oren, Mrs. William.....1149 E. Belmont

P

Pairitz, Mrs. Frank.....1436 Sunnymede
Parsons, Mrs. Robert 1464 Ridgedale Rd.
Pascuzzi, Mrs. Chris A.....1112 S. 20th St.
Pauszek, Mrs. Thomas B.....916 Riverside Dr.
Petrass, Mrs. Andrew.....3115 Prairie
Phelps, Mrs. Stephen R.....1331 Sunnymede
Plain, Mrs. George.....17836 Ponader Drive
Pyle, Mrs. H. Dale.....115 N. Sunnyside Ave.

R

Rigley, Mrs. Edward L.....1704 Ridgedale Rd.
Roberts, Mrs. Billy J.....1523 Crestwood Blvd.
Rosenheimer, Mrs. George M.....1425 E. Woodside
Rubens, Mrs. Eli.....1240 E. Irvington

S

Sanderson, Mrs. Robert B...1331 Sunnymede Ave.
Sandock, Mrs. Louis F.....235 S. Esther St.
Sandoz, Mrs. Harry H.....239 S. Hawthorne Dr.
Schaphorst, Mrs. Richard A...514 Lincoln Way E.
Schiller, Mrs. Herbert A.....1813 E. Cedar St.
Scott, Mrs. Frank M.....1220 E. Woodside
Selby, Mrs. Keith E.....1327 E. Wayne, No.
Sellers, Mrs. Francis.....814 Oakridge Dr.
Sensenich, Mrs. Roscoe L.....128 S. Scott St.
Sharp, Mrs. Merle C.....17780 Waxwing Lane
Shriner, Mrs. Richard.....53362 Juniper Rd.
Sisson, Mrs. Norvel D.....1614 Oak Park Dr.
Skillern, Mrs. Scott 1553 Southbrook Dr.
Slominski, Mrs. Harry H.....1862 College St.
Staunton, Mrs. Henry A.....124 S. 34th St.
Stiver, Mrs. Dan D.....1127 E. Wayne St. N.
Stogdill, Mrs. William.....520 N. Coquillard
Stratigos, Mrs. Joseph S.....527 N. Lafayette

T

Thompson, Mrs. John M.....1618 E. Cedar St.
Thornton, Mrs. M. J.....R. R. #2, Miami Rd.
Tirman, Mrs. Wallace S...1224 E. Wayne St., No.

V-W-Z

Vagner, Mrs. S. Bernard...53190 Willow Run Road
Van Fleit, Mrs. W. E.....1617 E. Cedar St.
Vurpillat, Mrs. F. J.....2102 E. Cedar St.
Ward, Mrs. James.....19248 Summers Dr.
Weiss, Mrs. Eugene.....1605 E. Washington Ave.
White, Mrs. Donald G.....1721 E. Altgeld
Wilson, Mrs. James M.....1507 E. Wayne
Zeiger, Mrs. Irwin L.....1205 E. Irvington

TIPPECANOE-WHITE COUNTIES

Lafayette

Babb, Mrs. Forrest J.....2106 South 9th St.
Baker, Mrs. John R.....R. R. 12
Bayley, Mrs. Richard D.....725 S. 11th St.
Buhrmester, Mrs. Harry C.....Freiberger Lane
Carpenter, Mrs. James B.....Rt. 26 East
Dubois, Mrs. Ramon B.....519 Calvert Lane
Fields, Mrs. Donald C.....R. R. 12
Flack, Mrs. Russell A.....3600 Cypress Lane
Graham, Mrs. Thomas G.....1213 Wea Ave.
Harter, Mrs. Eli B.....918 King St.
Holladay, Mrs. Lloyd J.....1403 S. 14th St.
Johnson, Mrs. Herbert S.....712 Cherokee
Jones, Mrs. David.....2055 S. Ninth St.
Karberg, Mrs. Richard J.....1212 El Prado
Klepinger, Mrs. Harry E.....909 N. 21st St.
Kohne, Mrs. Robert W.....1001 Pontiac
Landis, Mrs. C. Byron.....70 Collins Dr.
McAdams, Mrs. Hugh B.....2110 Birch Lane
McClelland, Mrs. Donald C.....1821 Highland Ave.
McKinley, Mrs. Joseph.....610 Lingle Terrace
Miller, Mrs. Albert J.....927 Highland Ave.
Neumann, Mrs. Kenneth O.....1410 S. 18th St.
Onorato, Mrs. Joseph J.....2606 South St.
Ratcliff, Mrs. Frank W.....1000 Wea Ave
Rothrock, Mrs. Philip W.....605 Lingle Ave.
Shively, Mrs. John L.....1615 S. 5th St.
Sholty, Mrs. William M.....Shadeland Farm Rd.
Smith, Mrs. Lowell C.....615 Lingle
Trout, Mrs. Carl J.....800 State St.
Underwood, Mrs. George M.....2540 Lafayette Dr.
Vermilya, Mrs. Robert W...R. R. 5, Cedar Bluff Rd.

West Lafayette

Bahler, Mrs. Dean R.....104 Mohawk Ln.
Bayley, Mrs. William E.....622 Rose St.
Bolin, Mrs. Robert C.....908 Windsor Dr.
Burns, Mrs. John T.....100 Tecumseh Park Place
Bush, Mrs. Jack A.....180 Creighton Rd.
Calvert, Mrs. Raymond R.....308 Park Lane
Canganelli, Mrs. Vincent G.....2310 N. River Rd.
Combs, Mrs. Loyal W.....514 Rose St.
Davis, Mrs. Howard B.....833 Hillcrest Rd.
Eaton, Mrs. Marion J.....425 Forest Hills Dr.
Elliott, Mrs. Paul W.....348 W. Stadium
Engeler, Mrs. James E.....1316 N. Grant St.
Ferguson, Mrs. William B.....430 Forest Hills Dr.
Hughes, Mrs. Richard R.....908 Carrolton Blvd.
Hull, Mrs. James E.....328 Leslie Ct.
Johnson, Mrs. Lowell R.....1601 Woodland Dr.
Klatch, Mrs. Ben Z.....1415 Woodland Dr.
Loop, Mrs. Frederick A.....119 Leslie Dr.
Marsh, Mrs. George W.....2121 Happy Hollow Rd.
Marvel, Mrs. Howard R.....136 Arrowhead Dr.
McFadden, Mrs. James M.....1424 N. Salisbury
Mather, Mrs. Charles R.....1815 Ravinia Rd.
Mather, Mrs. Robert L.....321 Leslie Ave.

Mount, Mrs. William M.....217 Pawnee Dr.
Peyton, Mrs. Frank W.....612 Ridgewood Dr.
Stahl, Mrs. Edward T.....324 Park Lane
Steele, Mrs. Hugh H.....118 Sunset Lane
Stuntz, Mrs. Edgar C.....271 E. Sunset Lane
Van Buskirk, Mrs. Edmund L.....1301 Ravinia Rd.
VanDen Bosch, Mrs. W. R.....715 Princess Dr.

Lind, Mrs. Jaap J.....Mulberry
Weller, Mrs. Ralph.....Rossville

VANDERBURGH COUNTY

(Southwestern)

Stover, Mrs. Wendell C.
20 Lake Shore Dr., Boonville

Evansville

A

Acre, Mrs. Robert R.....2311 Lincoln Ave.
Adler, Mrs. Ray N.....1660 Lincoln Ave.
Adye, Mrs. Wallace M.....320 Inwood Dr.
Alexander, Mrs. John R.....7720 Lauderdale Dr.
Antes, Mrs. Earl H.....1201 Bonnieview Dr.
Arendell, Mrs. Robert E.....710 S. Weinbach Ave.
Austin, Mrs. Eugene W.....2163 Bayard Park Dr.

B

Baker, Mrs. Mason R.....4500 E. Cherry St.
Barnhart, Mrs. Willard T.....507 S. Boeke Rd.
Beck, Mrs. Robert E.....6000 Newburgh Rd.
Beisel, Mrs. Larry.....1427 Lark
Bender, Mrs. Martin J.....2416 Bayard Pk. Dr.
Bennett, Mrs. Abner P.....961 Blue Ridge Rd.
Bissonette, Mrs. Roger P.....911 Colony Rd.
Boone, Mrs. Robert D.....417 S. Alvord
Brakel, Mrs. Frank, Jr.....1849 McConnell Ave.
Britt, Mrs. Robert L.....6317 Newburgh Rd.
Brockmole, Mrs. Arnold W.
5901 New Harmony Rd.
Brown, Mrs. George W.....757 S. Lombard
Bryan, Mrs. Stanton L.....3211 E. Mulberry St.
Buehner, Mrs. Donald F.....1200 Bonnieview Dr.
Burger, Mrs. Thomas C.....3915 Washington Ave.
Burnikel, Mrs. Ray H.....960 S. Rotherwood Ave.
Burress, Mrs. Clyde.....10100 Old St. Rd.

C

Cacia, Mrs. John J.....420 S. Boeke Rd.
Carlson, Mrs. Ralph F.....1350 Bayard Park Dr.
Clark, Mrs. Thomas W.....810 Plasa Dr.
Clouse, Mrs. Paul A.....5801 Newburgh Rd.
Coleman, Mrs. Joseph E.....2831 Wayside Dr.
Cooper, Mrs. Wallace.....4410 Oak St.
Corcoran, Mrs. P. J. V.....2412 E. Chandler Ave.
Crawford, Mrs. James...631 Blue Ridge Dr. West
Crevello, Mrs. Albert J.....1664 Lincoln Ave.
Cuff, Mrs. Steve C.....3105 E. Oak St.
Cullnane, Mrs. Chris W.....3020 Mt. Vernon Ave.
Cymbala, Mrs. Bohdan.....R. R. 8, Box 428

D

Daves, Mrs. W. Lawrence.....708 College Hwy.
Davidson, Mrs. Harold H.....800 Blue Ridge Rd.
Davis, Mrs. Max.....1426 Lark
Deems, Mrs. Myers.....6830 Arcadian Highway
Denzer, Mrs. Edward K.....540 Scenic Dr.
Denzer, Mrs. William O.....923 Bellemeade
Dieckman, Mrs. Herbert S.....10 Johnson Place
Dodd, Mrs. R. K.....1705 S. New Green River Rd.
Durkee, Mrs. Melvin S.....615 Trinity Dr.
Durkin, Mrs. John W., Jr.....2524 Adams St.
Dutchman, Mrs. William.....501 Senate
Dycus, Mrs. Walter A.....3400 Koring Rd.
Dyer, Mrs. Wallace K.....812 St. James Blvd.

E

Engel, Mrs. Edgar L.....1411 E. Park Dr.
Ewer, Mrs. Robert W.....7226 E. Blackford

F

Faith, Mrs. Ira L., Jr.....950 Blue Ridge Road
Faul, Mrs. Henry J.....725 S. Willow Rd.
Faw, Mrs. Melvin L.....2400 E. Chandler
Fenneman, Mrs. Robert J.
Box 145, R. R. 8, Old St. Rd.
Fisher, Mrs. William C.....1319 S. Kentucky
Fitzsimmons, Mrs. Elvin L.....500 S. Boeke Rd.

G

Garland, Mrs. Edger A.....719 Plaza Dr.
Garst, Mrs. Garland.....4313 Cherry Court
Gaul, Mrs. L. Edward.....508 S. Boeke Rd.
Geller, Mrs. Samuel.....R. R. 8, Box 143-A
Getty, Mrs. William H.....1810 Mt. Auburn Road
Giorgio, Mrs. Douglas J.....916 S. Burkhart Road
Gourieux, Mrs. DeVerre.....1019 S. Vann
Griep, Mrs. Arthur H.....5414 Madison Ave.
Grimm, Mrs. William C.....513 S. Rotherwood
Guckien, Mrs. Joseph L.....1612 S. E. Blvd.

H

Hammond, Mrs. R. Case.....6820 Arcadian Hwy.
Hare, Mrs. Daniel M.....7800 Taylor Ave.
Harlan, Mrs. William L.....731 S. Frederick
Harned, Mrs. Ben King, Jr.....8232 Maple Lane
Harris, Mrs. Robert L.....4 Woodmere Dr.
Hart, Mrs. L. Paul.....622 Trinity Dr.
Hartley, Mrs. Clarence A., Jr.....300 Hesmer Rd.
Hassel, Mrs. Walter.....732 E. Maryland
Heinrich, Mrs. Weston A.....1408 Lincoln Ave.
Hendershot, Mrs. Eugene L. 7006 Newburgh Road
Hermayer, Mrs. Stephen....1316 Bonnieview Dr.
Herrmann, Mrs. Gordon T.....218 S. Spring St.
Herzer, Mrs. Clarence C.....211 E. Mill Rd.
Himebaugh, Mrs. Gilbert J.....408 S. Alvord Blvd.
Hobgood, Mrs. James L.....6400 Jefferson
Hoover, Mrs. J. Guy.....864 Lodge Ave.
Hovda, Mrs. Richard B.....800 St. James Blvd.
Huggins, Mrs. Victor S.....520 S. Alvord Blvd.
Hyatt, Mrs. Gilbert T.....1616 Mt. Auburn Rd.

J-K

Johnson, Mrs. Stephen L.....2215 Lincoln Ave.
Johnson, Mrs. Victor.....1303 Masker Pk. Dr.
Kiechle, Mrs. Fred L.....726 S. E. First St.
Kimmel, Mrs. George.....200 S. Lincoln Park Dr.
Kincaid, Mrs. Robert S.....5417 Stringtown Rd.

L

Laubscher, Mrs. Clarence A....1201 Laubscher Rd.
Lawrence, Mrs. Joseph C...1362 E. Chandler Ave.
Leibundguth, Mrs. Henry.....5206 Lincoln Ave.
Leslie, Mrs. Ermil T.....1100 S. Vann
Lewis, Mrs. Earl T.....550 S. Ruston
Logan, Mrs. Jesse R.....503 First Ave.

M

MacKenzie, Mrs. Pierce.....2300 E. Gum St.
Manner, Mrs. Richard.....835 S. Burkhardt Rd.
Marchand, Mrs. John H. Jr.....1154 S. Villa
Marvel, Mrs. James A.....1431 Green Meadow
Mathews, Mrs. James R.....901 Meadow Rd.
Maxson, Mrs. Roy V.....763 S. Weinbach Ave.
McCool, Mrs. Joe H.....#1 Woodmore Lane
McDonald, Mrs. Joseph D.....4300 Lincoln Ave.
Meyer, Mrs. Keith T.....399 S. Alvord Blvd.
Miller, Mrs. LaVerne B.....501 Scenic Drive
Miller, Mrs. Milton J.....8201 Newburgh Rd.
Mills, Mrs. Fred E.....555 S. Kelsey Ave.
Mino, Mrs. Robert A.....2808 N. Shore Dr.
Moehlenkamp, Mrs. Charles E.
5401 Stringtown Rd.

N

Newnum, Mrs. Raymond L. . . 727 College Highway
Nicholson, Mrs. Raymond W. . . . 2009 Mahrendale
Niedermayer, Mrs. Alfred J. 815 College Hwy.
Nonte, Mrs. Leo R. 714 S. Willow Rd.
Noveroske, Mrs. Richard 3204 Stratford Rd.

O

Oswald, Mrs. Robert H. 2423 Lincoln Ave.

P

Pastor, Mrs. Julius W. 5901 Washington Ave.
Pavlick, Mrs. Theodore J. 4212 Jennings Lane
Pemberton, Mrs. Jack James Falstead Rd., R. R. 1
Pollard, Mrs. Walter S. . . . 1230 S. E. Second St.
Porro, Mrs. Francis W. 909 Villa Dr.
Present, Mrs. Julian D. 201 S. Parker Dr.
Pugh, Mrs. Willis L. 5204 Lincoln Ave.

R

Ratcliffe, Mrs. Albert W. 510 S. E. First St.
Reich, Mrs. Clarence E. 1209 N. Fulton Ave.
Richey, Mrs. Clifford O. 407 Congress Ave.
Rietman, Mrs. H. Jerome 2325 Lincoln Ave.
Rininger, Mrs. Harold C. 2154 E. Gum St.
Ritchie, Mrs. William D. 5201 Stringtown Rd.
Ritz, Mrs. Albert S. 2004 Lincoln Ave.
Rosenblatt, Mrs. Bernard B. . . 626 St. James Blvd.
Royster, Mrs. Robert Allen . . . 34 Johnson Place
Ruddick, Mrs. Hobart Reginia Pacis Home
Rudolph, Mrs. Kenneth 2701 E. Walnut
Rupper, Mrs. Warren R.
Heckle Rd., Box 159, R. R. 3
Russell, Mrs. Richard H. 1015 Harrelton Ct.

S

Schimmelpfennig, Mrs. Robert W.
3014 Washington Ave.
Schirmer, Mrs. Robert H. . . . 2710 Hartmetz Ave.
Schneider, Mrs. Charles P. . . . 2924 W. Maryland St.
Sheehan, Mrs. Ernest 3305 Sweetser Ave.
Sinn, Mrs. Charles M. 1509 Redwing Dr.
Slaughter, Mrs. Howard C. 651 St. Mary's Dr.
Slaughter, Mrs. John C. 622 College Hwy.
Slaughter, Mrs. Owen L. . . . 506 St. James Blvd. So.
Smith, Mrs. Roy M. 417 Senate
Sprecher, Mrs. Herman C. . . . 6601 Newburgh Road
Springstun, Mrs. W. Russel 854 Lodge Ave.
Stallings, Mrs. Hugh A. 7601 Newburgh Rd.
Steele, Mrs. Paul W. 1906 Bellemeade Ave.
Sterne, Mrs. John H. 2309 E. Gum St.
Stewart, Mrs. L. Raymond 2081 Polaris
Stork, Mrs. Urban F. D. 414 S. Kelsey Ave.
Strueh, Mrs. Paul E. 1207 Harrelton Ct.

T

Tager, Mrs. Stephen N. 700 S. Meadow Rd.
Tisserand, Mrs. John B. Jr. . . 637 College Highway
Tuholski, Mrs. James M. 520 S. Roosevelt Dr.
Tweedall, Mrs. Daniel C. 900 S. Meadow Rd.

V-W

Visher, Mrs. John W. 510 E. Mt. Pleasant Rd.
Vonder Haar, Mrs. Thomas E.
901 S. Burkhardt Rd.
Walker, Mrs. William F. 1220 Cullen Ave.
Walter, Mrs. Robert F. 1514 S. Kentucky Ave.
Warner, Mrs. Charles L. 4120 Bellemeade Ave.
Waters, Mrs. George E. 2 Woodmere Dr.
Weber, Mrs. Edgar H. 3008 E. Powell Ave.
Weiss, Mrs. H. G. 1014 E. Powell Ave.
Welborn, Mrs. Mell B. 1832 Mt. Auburn Rd.
Wilhelmus, Mrs. C. Kenneth . . 6929 Newburgh Rd.
Wilhelmus, Mrs. Gilbert M. 5901 Newburgh Rd.
Willison, Mrs. George W. 605 St. Mary's Dr.
Wilson, Mrs. John D. 921 Colony Rd.
Wilson, Mrs. Ralph 1522 Audubon Dr.
Woodson, Mrs. Dan 28 E. Powell
Wynn, Mrs. Justice F. 651 S. Weinbach Ave.

Y-Z

Young, Mrs. C. Curtis, Jr. 2327 Lincoln Ave.
Zeier, Mrs. Francis G. 3708 Mulberry
Zimmerman, Mrs. Harold 513 S. Boeke Rd.

Challman, Mrs. William . . 502 Walnut, Mt. Vernon
Crist, Mrs. John R. 320 Emmick, Mt. Vernon
Hirsch, Mrs. H. L. . . . 801 Williams Dr., Mt. Vernon
Oliphant, Mrs. Frank W.
701 Mulberry St., Mt. Vernon
Vogel, Mrs. John L. . . 530 E. Fifth St., Mt. Vernon
Colvin, Mrs. Robert C. Peachtree St., Newburgh
Rusche, Mrs. Henry J. Hwy. 261, Newburgh
Zwickel, Mrs. R. E. Darby Hills, Newburgh
Ropp, Mrs. Harold E. . . . Church St., New Harmony

VIGO COUNTY

Speas, Mrs. Robert C. Box 22, Seelyville

Terre Haute

A

Anderson, Mrs. W. C. 380 S. 22nd St.
Ault, Mrs. Roy J. 200 Lakeview Dr.

B

Bannon, Mrs. William G. 2126 Ohio Blvd.
Blum, Mrs. Leon L. 3200 Ohio Blvd.
Bopp, Mrs. Henry W., Sr. 132 Barton Ave.
Bopp, Mrs. Henry W., Jr. 2237 Poplar St.
Bopp, Mrs. James 330 Hamilton Dr.
Boyd, Mrs. H. Clark 44 Long Ridge Rd.
Brown, Mrs. Robert R. 2544 N. Ninth
Burkle, Mrs. Robert J. 128 Gardendale Rd.

C-D

CaJacob, Mrs. Melville E. 1000 S. Sixth St.
Caldwell, Mrs. M. V. R. R. 7, Box 449
Combs, Mrs. Stuart R. 2620 N. 10th St.
Conforti, Mrs. Victor P. 2540 N. 10th St.
Conway, Mrs. Thomas J. 1014 So. 22nd Street
Crockett, Mrs. Wayne A. 152 Monterey Ave.
Davis, Mrs. Paul E. 3301 N. Center
Denny, Mrs. E. Rankin 2718 Wilson Dr.
Dierdorf, Mrs. Fred 103 S. 23rd St.
Drummy, Mrs. W. W. Jr. 231 Fruitridge
Dyer, Mrs. G. Wallace 2710 Wilson Dr.

E-F

Freed, Mrs. John E., Sr. 2408 N. 10th St.
Freed, Mrs. John E., Jr. 2425 North 8th St.

G

Gerrish, Mrs. Don A. R. R. No. 7
Gilbert, Mrs. Ivan 2641 Crawford St.
Gillotte, Mrs. J. P. R. R. 7
Goodman, Mrs. Hubert T. 220 Gardendale Rd.
Gossom, Mrs. Donn R. 1904 Ohio Blvd.

H

Haslem, Mrs. Ezra R. 30 Circle Drive
Haslem, Mrs. John R. 2501 Poplar St.
Hogan, Mrs. Thomas W. 332 So. 31st Street
Humphrey, Mrs. Paul E. 2631 N. Ninth St.

J-K

Johnson, Mrs. Paul D. Jr. 3101 Poplar St.
Kabel, Mrs. Robert N. 2201 Ohio Blvd.
Krieble, Mrs. William W. 10 Bogart Dr.
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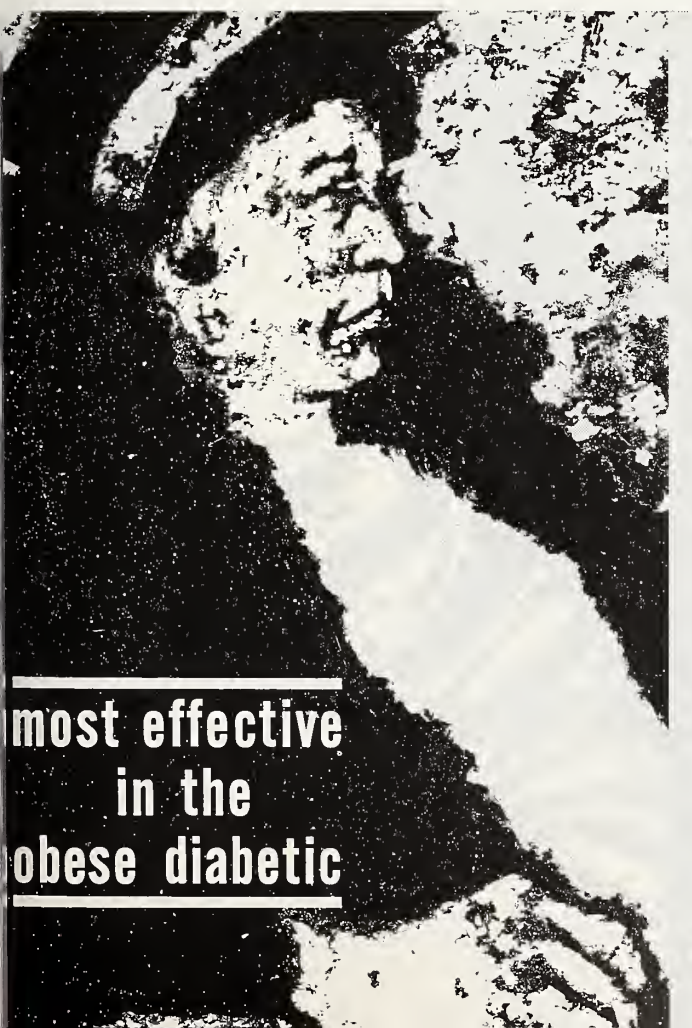


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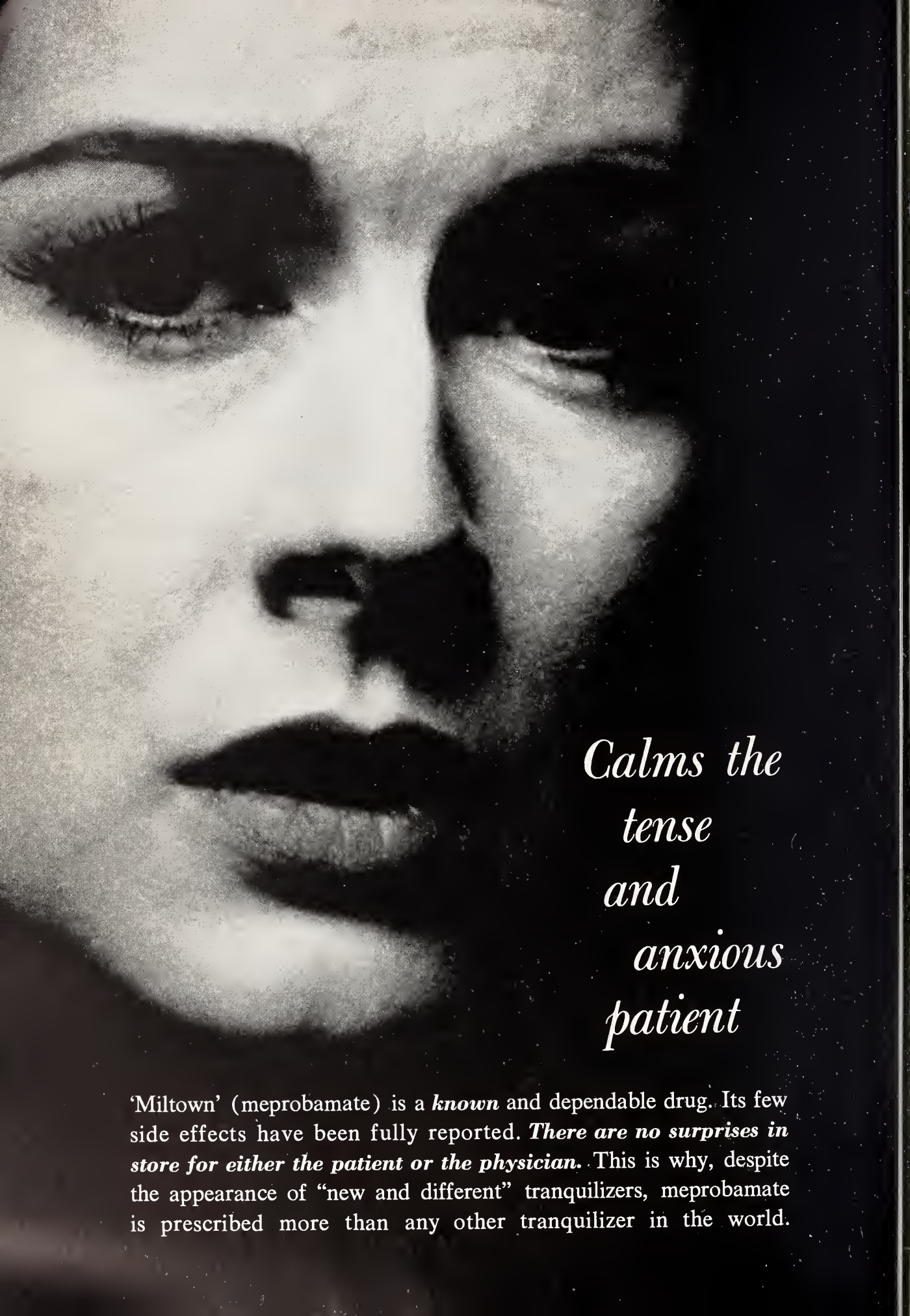
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Bibliography: 1. Williams, R. H.: Textbook of Endocrinology, Ed. 3, Saunders, Philadelphia, 1962, p. 610. 2. Gordon, E. S.: Metabolism 11:819, 1962. 3. Grodsky, G. M. et al.: Metabolism 12:278, 1963. 4. Sadow, H. S.: Metabolism 12:333, 1963. 5. West, K. M. and Tophoj, E.: Metabolism 10:689, 1961. 6. Yalow, R. S. and Berson, S. A.: Diabetes 9:254, 1960. 7. Weller, C. et al.: Scientific Exhibit, A.M.A., June 1962. 8. Weller, C. et al.: Metabolism 11:1134, 1962. 9. Radding, R. S. et al.: Metabolism 11:404, 1962.

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30,000	2,500	1,250	77,422	10,740	11,791	22,531
40,000	2,500	1,250	77,422	13,240	14,534	27,774
50,000	2,500	1,250	77,422	14,740	16,179	30,919
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*Dr. Annis will be installed at the June 18 meeting of the AMA. The President-Elect had not been named at the time this issue went to press. His election will be announced in the July *Journal*.

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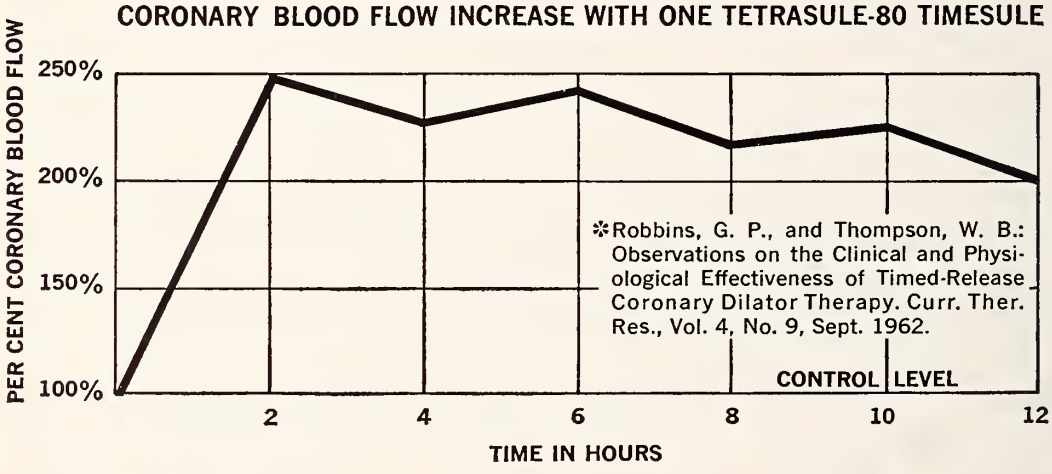


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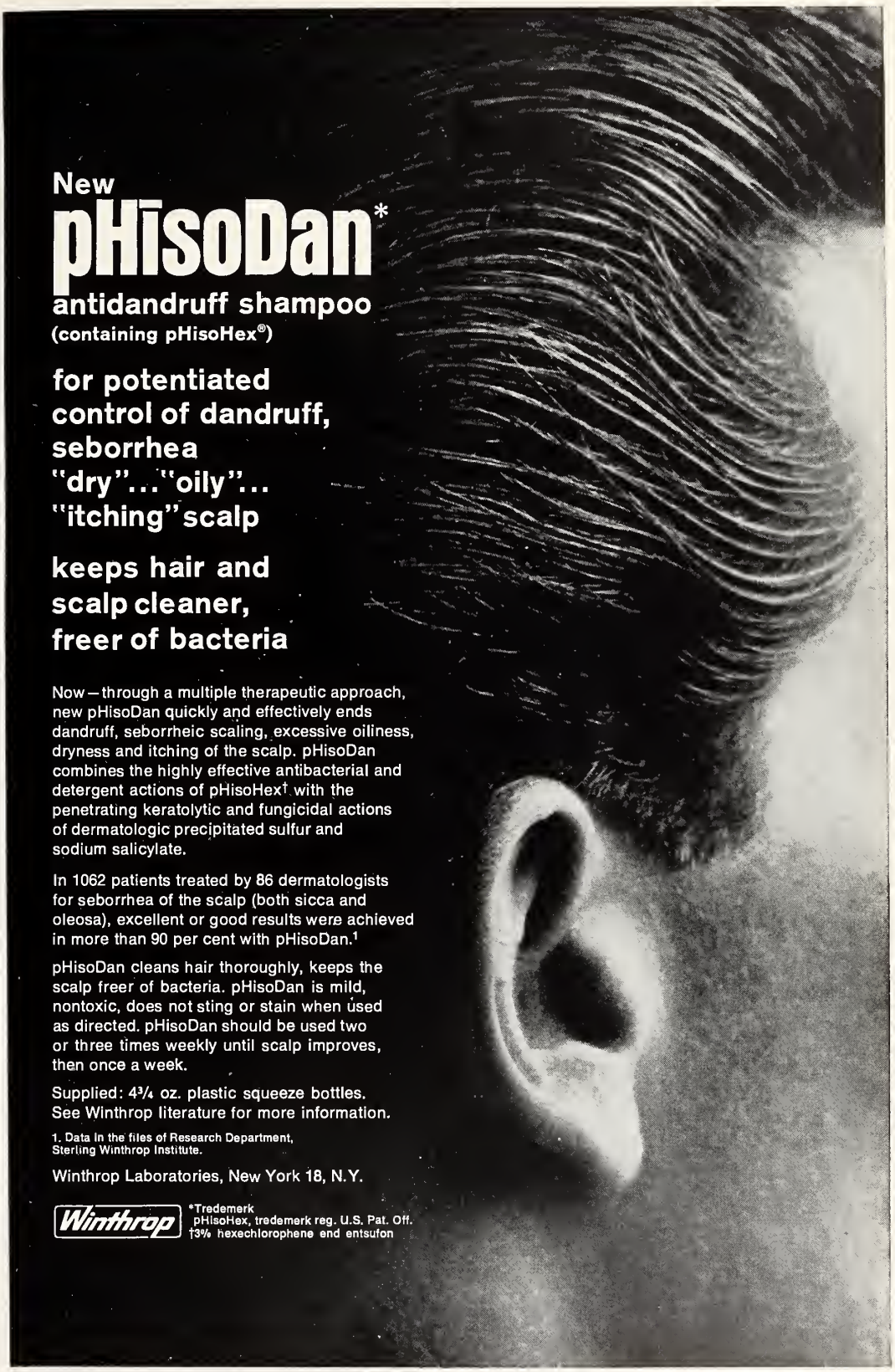
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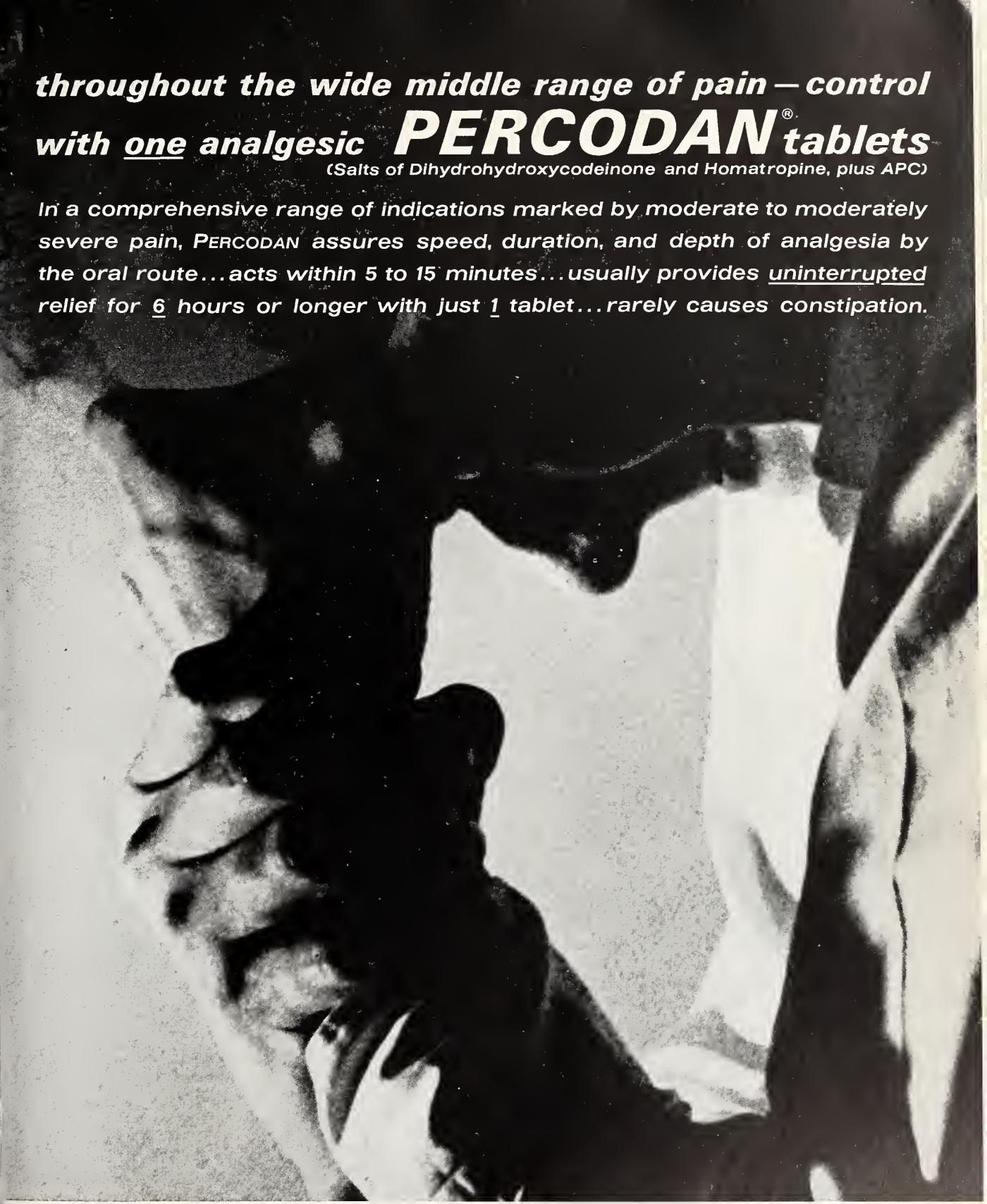
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Purdue University, Calumet Center	Hammond	Miss Mary Ruth Maginsky, R.N.
School of Practical Nursing, Indianapolis Public Schools	Indianapolis	Mrs. Marguerite F. Klein, R.N.
Grant School of Practical Nursing, Marion City Schools	Marion	Mrs. Geraldine Huber, R.N. (Instructor-Supervisor)
Muncie School of Practical Nursing	Muncie	Mrs. Wilma Whetsell, R.N.
South Bend School of Practical Nursing, School City of South Bend	South Bend	Mrs. Roma Vermande, R.N. (Instructor-Supervisor)
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Approved Hospitals in Indiana*

April 1, 1963

ADAMS COUNTY

Adams County Memorial Hospital.
804 Mercer Ave., Decatur.
Mr. Thurman I. Drew, Adm.

ALLEN COUNTY

Parkview Memorial Hospital, Inc.
2200 Randalia Dr., Fort Wayne.
Mr. Mark Slen, Adm.

Irene Byron Hospital
12515 Lima Rd., R.R. 13, Fort Wayne
O. T. Kidder, M.D., Adm. & Med. Dir.

The Lutheran Hospital of Fort Wayne.
3024 Fairfield Ave., Fort Wayne.
Mr. Edgar C. Kruse, Adm.

St. Joseph's Hospital.
730 W. Berry St., Fort Wayne.
Sister M. Odillia, Adm.

BARTHOLOMEW COUNTY

Bartholomew County Hospital.
2400 East 17th St., Columbus.
Miss Olive M. Murphy, R.N., Adm.

BLACKFORD COUNTY

Blackford County Hospital.
503 E. Van Cleve St., Hartford City.
Mrs. Mabel Brown, Adm.

BOONE COUNTY

Witham Memorial Hospital.
1124 N. Lebanon St., Lebanon.
Mr. John H. Luff, Adm.

CASS COUNTY

Memorial Hospital.
1101-1115 Michigan Ave., Logansport.
Mr. Herbert L. Fromm, Adm.

St. Joseph Hospital.
26th and North Sts., Logansport.
Sister M. Laurine, Adm.

CLARK COUNTY

Clark County Memorial Hospital.
210 Sparks Ave., Jeffersonville.
Mr. Robert D. Shaffer, Adm.

CLAY COUNTY

Clay County Hospital.
1206 E. National Ave., Brazil.
Mr. Karl J. Dickerson, Adm.

CLINTON COUNTY

Clinton County Hospital.
1300 S. Jackson St., Frankfort
Mr. William Russell, Adm.

DAVIESS COUNTY

Daviess County Hospital.
1307 Bedford Road, Washington.
Mr. Lawrence Trousdale, Adm.

DEARBORN COUNTY

Dearborn County Hospital.
600 Wilson Creek Rd., Lawrenceburg
Mr. John H. Tallmadge, Adm.

DECATUR COUNTY

Decatur County Memorial Hospital.
720 N. Lincoln St., Greensburg.
Mr. William D. Gibson, Adm.

DEKALB COUNTY

Dr. Bonnell M. Souder Hospital, Inc.
206 W. 7th St., Auburn.
Bonnell M. Souder, M.D., Adm.

Garrett Community Hospital, Inc.
200 Ijams St., Garrett
Mr. Carl F. Arntson, Adm.

Sanders General Hospital.
1007 S. Main St., Auburn.
Jesse A. Sanders, M.D., Adm.

DELAWARE COUNTY

Ball Memorial Hospital.
2401 University Ave., Muncie.
Mr. Walter G. Ebert, Adm.

DUBOIS COUNTY

Memorial Hospital of Dubois County.
800 West 9th St., Jasper.
Mother M. Eugene, Adm.

The Stork Memorial Hospital.
530 4th St., Huntingburg.
Sister Josepha, Adm.

ELKHART COUNTY

Elkhart General Hospital.
600 East Boulevard, Elkhart.
Mr. Emery K. Zimmerman, Adm.

Goshen General Hospital.
200 High Park Avenue, Goshen.
Mr. W. J. Dye, Adm.

FAYETTE COUNTY

Fayette Memorial Hospital.
1941 Virginia Ave., Connersville.
Mr. Richards M. Manuel, Adm.

FLOYD COUNTY

Memorial Hospital of Floyd County
1850 State St., New Albany.
Mr. William I. Fender, Jr., Adm.

Southern Indiana Tuberculosis Hospital.
New Albany.
Joseph H. Geyer, M.D., Adm.

FULTON COUNTY

Woodlawn Hospital.
624 Pontiac St., Rochester.
Mr. Edward Kucinski, Adm.

GIBSON COUNTY

Gibson General Hospital.
419 W. State St., Princeton.
Mr. Wade Henry, Adm.

* Approved by the Indiana Council for Hospital Licensure and the Indiana State Board of Health.

GRANT COUNTY

Marion General Hospital.
Wabash and Euclid, Marion.
Mr. John W. Green, Adm.

GREENE COUNTY

Freeman Greene County Hospital.
410 "A" St., N.E., Linton.
Mr. Avery Murray, Adm.

HAMILTON COUNTY

Riverview Hospital.
R.R. 4, Noblesville
Mr. John Keilholz, Adm.

HANCOCK COUNTY

Hancock County Memorial Hospital.
800 North State Street, Greenfield.
Mr. C. L. Morris, Adm.

HARRISON COUNTY

Harrison County Hospital.
Corydon.
Mrs. Pauline Churchill, R.N., Adm.

HENDRICKS COUNTY

Hendricks County Hospital.
1000 E. Main St., Danville.
Mr. Harry T. Haver, Jr., Adm.

HENRY COUNTY

Henry County Hospital.
Rural St., New Castle.
Mr. Herbert A. Schacht, Adm.

The Clinic.
1319 Church St., New Castle.
Kenneth G. Hill, M.D., Adm.

HOWARD COUNTY

Howard Community Hospital.
3500 S. LaFountain St., Kokomo.
Mr. Barry T. Bedenkop, Adm.

St. Joseph Memorial Hospital.
1907 W. Sycamore St., Kokomo.
Sister Ann Rita, Adm.

HUNTINGTON COUNTY

Huntington County Hospital.
1215 Etna Ave., Huntington.
Mr. Carl S. Smyth, Adm.

JACKSON COUNTY

Jackson County Schneck Memorial Hospital.
Bruce and Poplar St., Seymour.
Mr. Ralph W. Keyes, Adm.

JASPER COUNTY

Jasper County Hospital.
216-224 S. Cullen St., Rensselaer.
Mrs. Ruth Schumaker, R.N., Adm.

JAY COUNTY

Jay County Hospital.
505 W. Arch St., Portland.
Mr. Garrett Graham, Adm.

JEFFERSON COUNTY

King's Daughters' Hospital.
112 Presbyterian Ave., Madison.
Mr. W. A. McAlexander, Adm.

JOHNSON COUNTY

Indiana Masonic Home Hospital
690 State St., Franklin.
Mr. Roy Turner, Jr., Supt.

Johnson County Memorial Hospital.
R.R. 1, Franklin.
Mr. George P. Goshorn, Adm.

KNOX COUNTY

Good Samaritan Hospital.
410 S. 7th St., Vincennes.
Mr. Stephen Collins, Adm.

Hillcrest Tuberculosis Hospital.
North 2nd St. Road, Vincennes.
J. Frank W. Stewart, M.D., Adm.

KOSCIUSKO COUNTY

Murphy Medical Center.
101 W. Winona Ave., Warsaw.
Mrs. Hazel J. Murphy, Adm.

LAGRANGE COUNTY

LaGrange County Hospital.
R.R. 4, LaGrange.
Miss Edythe L. Gappinger, R.N., Adm.

LAKE COUNTY

James O. Parramore Hospital.
Rural—106 Road O, Crown Point.
Phillip H. Becker, M.D., Adm.

The Methodist Hospital of Gary, Inc.
1600 W. 6th Ave., Gary.
Mr. Everett A. Johnson, Adm.

Our Lady of Mercy Hospital.
Lincoln Highway, Dyer.
Sister Mary Pierre, Adm.

St. Catherine Hospital.
4321 Fir St., East Chicago.
Sister M. Vetusa, R.N., Adm.

St. Margaret Hospital.
25 Douglas St., Hammond.
Sister M. Delphina, R.N., Adm.

St. Mary Mercy Hospital.
540 Tyler St., Gary.
Sister M. Cornelia, R.N., Adm.

LAPORTE COUNTY

Doctors' Hospital.
125 E. 5th St., Michigan City.
Mr. Byron N. Whitford, Dir.

Community Hospital of LaPorte, Inc.
215 Pine Lake Ave., LaPorte.
Mr. L. H. Furlong, Adm.

Holy Family Hospital.
205 "E" St., LaPorte.
Sister M. Justine, Adm.

St. Anthony Hospital.
Wabash and Ann Sts., Michigan City.
Sister M. Regis, Adm.

Warren Hospital, Inc.
719 Franklin St., Michigan City.
Mr. John E. Bertone, Adm.

LAWRENCE COUNTY

Dunn Memorial Hospital.
1616 23rd St., Bedford.
Mrs. Helen Boyer, R.N., Adm.

MADISON COUNTY

Mercy Hospital, Inc.
1331 South "A" St., Elwood.
Sister M. Andrea, R.N., Adm.

APPROVED HOSPITALS
Continued

St. John's Hickey Memorial Hospital.
127 W. 19th St., Anderson.
Sister Mary, Adm.
Community Hospital of Anderson and Madison County.
1515 N. Madison Ave., Anderson.
Mr. Gordon S. Boughton, Adm.

MARION COUNTY

Community Hospital of Indianapolis, Inc.
1500 N. Ritter Ave., Indianapolis.
Mr. W. C. McLin, Adm.
Marion County General Hospital.
960 Locke St., Indianapolis.
Arvine G. Popplewell, M.D., Supt. and Dir. of Hosp.
Indiana University Medical Center Hospitals.
1100 W. Michigan St., Indianapolis.
Mr. Edmund J. Shea, Adm.
Medico-Environs, Inc.
3350 Carson Ave., Indianapolis.
Mr. Donald L. Ciolli, Adm.
Memorial Clinic of Indianapolis.
3202 N. Meridian St., Indianapolis.
Mr. Richard L. Albright, Adm.
Methodist Hospital of Indiana, Inc.
1604 N. Capitol Ave., Indianapolis.
Mr. Jack A. L. Hahn, Adm.
St. Elizabeth's Maternity Hospital and Infant Home.
2500 Churchman Ave., Indianapolis.
Rev. Donald Schmidlin, Act. Adm.
St. Francis Hospital.
N. 17th St. and Sherman Dr., Beech Grove.
Sister Vincentiana, Adm.
St. Vincent's Hospital.
120 W. Fall Creek Parkway, Indianapolis.
Sister Mary Helen, Adm.
Marion County Tuberculosis Hospital.
Sunnyside Sanatorium, 6255 Sunnyside Road, Indianapolis.
John D. Miller, M.D., Adm. & Med. Dir.

MARSHALL COUNTY

Community Hospital of German Township, Inc.
411 Grant St., Bremen.
Mrs. Mary Harris, R.N., Adm.
Parkview Hospital.
1401 N. Michigan St., Plymouth.
Miss Lela Diefenbaugh, R.N., Adm.

MIAMI COUNTY

Dukes Memorial Hospital.
275 West 12th St., Peru.
Mr. Jack G. Fougerousse, Adm.
Wabash Employes' Hospital Association.
North Broadway, Peru.
Mr. William R. Milnes, Supt.
360 East Grand Ave., Decatur, Ill.

MONROE COUNTY

Bloomington Hospital.
640 S. Rogers St., Bloomington.
Mr. John H. Shephard, Adm.

MONTGOMERY COUNTY

Montgomery County Culver Union Hospital.
308 Binford St., Crawfordsville.
Mr. Wm. R. Saunders, Adm.

MORGAN COUNTY

Comer-Kendrick Hospital, Inc.
130 N. Indiana St., Mooresville.
William Kendrick, M.D., Adm.
Morgan County Memorial Hospital.
St. Rd. 252, Martinsville.
Mr. Ernest Baughman, Adm.

NEWTON COUNTY

George Ade Memorial Hospital
Brook, Ind.
Mr. Harry T. Haver, Jr., Adm.

NOBLE COUNTY

McCray Memorial Hospital.
Hospital Dr., Kendallville.
Mr. Charles Robbins, Sr., Adm.

ORANGE COUNTY

Orange County Hospital.
Sandy Hook Road, Paoli.
Mr. Chesney D. Malone, Adm.

PARKE COUNTY

Indiana State Hospital for Chest Diseases.
R.R. 1, Rockville.
William D. May, M.D., Supt.

PERRY COUNTY

Perry County Memorial Hospital.
Star Route, Tell City.
Mr. Eugene J. Saxton, Adm.

PORTER COUNTY

Porter Memorial Hospital.
814 LaPorte Ave., Valparaiso.
Mr. Arthur S. Malasto, Adm.

PULASKI COUNTY

Pulaski Memorial Hospital.
State Road 14, East, Winamac.
Mr. Benjamin L. Underwood, Adm.

PUTNAM COUNTY

Putnam County Hospital.
330 Greenwood Ave., Greencastle.
Mr. James F. Shepherd, Adm.

RANDOLPH COUNTY

Randolph County Hospital.
Oak Street, Winchester.
Mr. Vernon W. Hyer, Adm.
Union City Memorial Hospital Association.
North Columbia St., Union City.
Miss Kathryn E. Larrance, Adm.

RIPLEY COUNTY

Margaret Mary Hospital.
Rosemont Division, Batesville.
Sister M. Theresa, Adm.

RUSH COUNTY

Rush Memorial Hospital.
Main at 13th St., Rushville.
Miss Nina Bosso, R.N., Adm.

SCOTT COUNTY

Scott County Memorial Hospital.
Highway 31 North, Scottsburg.
Mr. James K. Fisler, Adm.

SHELBY COUNTY

William S. Major Hospital.
150 W. Washington St., Shelbyville.
Mr. Roland E. Kohr, Adm.

ST. JOSEPH COUNTY

Healthwin Hospital.
20531 West Darden Road, South Bend.
E. W. Custer, M.D., Adm.

Memorial Hospital of South Bend.
615 N. Michigan St., South Bend.
Mr. Richard W. Trenkner, Adm.

St. Joseph Hospital.
215 W. 4th St., Mishawaka
Sister M. Reginalda, Adm.

St. Joseph's Hospital of South Bend.
811 E. Madison St., South Bend.
Sister M. Michaeleen, Adm.

South Bend Osteopathic Hospital.
2515 E. Jefferson Blvd., South Bend.
A. F. Kull, D.O., Adm.

STARKE COUNTY

Little Company of Mary Hospital and Home for Chronically Ill, Inc.
San Pierre, Ind.
Mother M. Catherine, Adm.

Starke Memorial Hospital.
102 Culver Road, Knox.
Mr. Lynn L. Landis, Adm.

STEUBEN COUNTY

Cameron Memorial Hospitals, Inc.
416 E. Maumee, Angola.
Mrs. Harriet Angus, R.N., Adm.

Elmhurst Hospital, Inc.
909 W. Maumee, Angola.
Mr. Robert I. Cook, Adm.

SULLIVAN COUNTY

Mary Sherman Hospital.
320 N. Section St., Sullivan.
Mr. William H. Sluder, Adm.

TIPPECANOE COUNTY

Indiana State Soldiers Home Hospital
State Road 43 North, Lafayette.
Col. Harold A. Shindler, Commandant, Adm.

Lafayette Home Hospital, Inc.
2400 E. South St., Lafayette.
Mr. Franklin E. Simek, Adm.

St. Elizabeth Hospital.
1021 N. 14th St., Lafayette.
Sister M. Mirella, Adm.

TIPTON COUNTY

Tipton County Memorial Hospital.
1032 South Main Street, Tipton.
Mr. James C. Talley, Adm.

VANDERBURGH COUNTY

Boehne Tuberculosis Hospital.
Station B., Upper Mount Vernon Road, Evansville.
Paul D. Crimm, M.D., Adm.

Protestant Deaconess Hospital.
600-700 Mary St., Evansville.
Albert G. Hahn, L.H.D., Adm.

St. Mary's Hospital, Inc.
3700 Washington Ave., Evansville.
Sister Mary James, Adm.

Welborn Memorial Baptist Hospital, Inc.
412 S.E. 4th St., Evansville.
Mr. Nolan R. Lackey, Adm.

VERMILLION COUNTY

Vermillion County Hospital.
800 S. Main St., Clinton.
Miss Beulah Fisher, R.N., Adm.

VIGO COUNTY

St. Anthony Hospital.
1021 S. 6th St., Terre Haute.
Sister M. Amelia, R.N., Adm.

Union Hospital, Inc.
1606 N. 7th St., Terre Haute.
Miss Ellen E. Church, R.N., Adm.

WABASH COUNTY

Wabash County Hospital.
670 N. East St., Wabash.
Mr. Richard G. Shedd, Adm.

WARREN COUNTY

Community Hospital.
412 N. Monroe St., Williamsport.
Mrs. Nellie O. Rudolph, Adm.

WASHINGTON COUNTY

Washington County Memorial Hospital.
Shelby Street, Salem.
Mr. Harry M. Voyles, Adm.

WAYNE COUNTY

Reid Memorial Hospital.
Spring Grove, Richmond.
Mr. G. Dale Splitstone, Adm.

WELLS COUNTY

Clinic Hospital.
309 S. Main St., Bluffton.
Mr. Ronald M. Adams, Supt.
Wells County Hospital.
1116 S. Main St., Bluffton.
Mrs. Dorothy Elett, R.N., Adm.

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APPROVED HOSPITALS

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WHITE COUNTY

White County Memorial Hospital
Monticello
Mr. George R. Banjak, Adm.

WHITLEY COUNTY

Memorial Hospital.
215 E. Van Buren St., Columbia City.
Mr. Carl F. Arntson, Adm.

Whitley County Memorial Hospital.
353 N. Oak St., Columbia City
Mr. Stanley S. Mullendore, Adm.

Approved Mental Hospitals in Indiana

See State-Operated Mental Institutions, Page 758

Clearview Hospital.
Kratzville Road, Evansville
Mr. William J. Bulger, Adm.

Ann Taylor Hospital.
2231 Broadway, Indianapolis.
Mrs. Ann Long, Mrs. May Masters, Adms.

Wabash Valley Sanitarium.
Lafayette.
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Licensed Nursing Homes in Indiana

January, 1963

ADAMS COUNTY

Berne Nursing Home
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Miss Pauline Hostetler, Adm.

ALLEN COUNTY

Crow's Haven
2440 Bowser Ave., Fort Wayne
Lyle Crow, Adm.

Fairfield Convalescent Home
2520 Fairfield Ave., Ft. Wayne
John R. Morse & Beatrice M. Morse, Adms.

Glenacres, Inc.
3420 E. State St., Fort Wayne
Ruby J. Setser, Adm.

Grace Convalescent Home
1529 California Ave., Ft. Wayne
Mrs. Emma Meyer, Adm.

Hope Manor
611 W. Wayne St., Fort Wayne
Charles W. and Ruby J. Setser, Adms.

Lawton Nursing Home, Inc.
1649 Spy Run Ave., Fort Wayne
Mr. Walter C. Buuck, Adm.

Twin Maples Nursing Home
734 W. Washington St., Fort Wayne
Mrs. Effie Johnston, Adm.

West Berry Rest Home
903 West Berry, Fort Wayne
Charles W. and Ruby J. Setser, Adms.

BARTHOLOMEW COUNTY

Golden Age Retirement Center
R. R. 4, Shady Lane Rd., Columbus
Thelma Sharp, Adm.

Luther Nursing Home
837 4th St., Columbus
Mrs. Mary Luther, Adm.

Mil-Mar Nursing Home
417 Pearl St., Columbus
Mildred H. Dooley, Adm.

Patrick's Nursing Home
802 Fourth St., Columbus
Pearl Patrick, Adm.

Shady Nook Rest Home
R. R. 8, Columbus
Mrs. Louanna Niemoeller, Adm.

Shanklin Nursing Home
705 Sycamore St., Columbus
Christine Stockdale, Adm.

BENTON COUNTY

Mary's Nursing Home
Maple & Elm, Earl Park
Mrs. Mary Belange, Adm.

BLACKFORD COUNTY

Jackson Nursing Home #1
423 S. Main St., Montpelier
Rolland W. Jackson, Adm.

Jackson Nursing Home #2
110 E. Huntington St., Montpelier
Rolland W. Jackson, Adm.

Waldo House
511 W. Washington St., Hartford City
Mrs. Martha Waldo, Adm.

BOONE COUNTY

Davis Nursing Home
310 W. Main St., Thorntown
Mrs. Ruth Davis, Adm.

English Nursing Home
1015 N. Lebanon, Lebanon
Mrs. Bessie May English, Adm.

Fultz Nursing Home
40 S. Third St., Zionsville
Mr. Jack E. Fultz, Adm.

Harris Nursing Home
210 S. Pearl St., Thorntown
Mrs. Maud Harris, Adm.

Indiana Baptist Home, Inc.
R. R. 1, Zionsville
Loren E. Moore, Adm.

Maple Lawn Nursing Home
195 N. Maple, Zionsville
Mrs. Helena B. Davis, Adm.

CARROLL COUNTY

Cornell Nursing Home
Cutler, Indiana
Mrs. Viola V. Cornell, Adm.

Deer Creek Nursing Home
R. R. 1, Camden
Miss Mabel E. Bechdolt, Adm.

Fix Community Home, Inc.
404 S. Center St., Flora
Charles E. Fix, Adm.

Good Will Nursing Home
Corner Main and Monroe Sts., Camden
Thomas and Mildred Shockley, Adms.

CASS COUNTY

Huffman Nursing Home
2527 E. Broadway, Logansport
Honour R. Huffman, Adm.

Rest Haven Home
731 North St., Logansport
Miss Olive S. Jones, Adm.

Webster Nursing Home
806 North St., Logansport
Mrs. Nora B. Webster, Adm.

CLARK COUNTY

Hillcrest Nursing Home, Inc.
203 Sparks Ave., Jeffersonville
A. Lyle Havens, M.D., Adm.

The Ladies Home, Inc.
330 W. Market St., Jeffersonville
Anna Schimpff, Adm.

Maple Court Nursing Home
109 E. Maple Court, Clarksville
Goldie G. and Lola C. Hollingsworth, Adms.

O'Brien Nursing Home
R. R. 1, Allison Lane, Jeffersonville
Mrs. Mary O'Brien, Adm.

Perkins Nursing Home
1315 Spring St., Jeffersonville
Mrs. Dovie Perkins, Adm.

Twilight Nursing Home #1
210 E. Maple St., Jeffersonville
Mrs. Delilah Jean Goodwin, Adm.

Twilight Nursing Home #3
418 Riverside Dr., Jeffersonville
Mrs. Delilah Jean Goodwin, Adm.

CLAY COUNTY

Clay County Nursing Home
R. R. 2, Box 139, Center Point
Hugh W. McCann, Adm.

Leavitt Street Nursing Home
503 S. Leavitt St., Brazil
Joan Slack, Adm.

Porter's Rest Home
R. R. 5, Brazil
Mr. and Mrs. Clint Porter, Adms.

Wilson Nursing Home
525 E. Mechanic St., Brazil
Mrs. Mary I. Wilson, Adm.

CLINTON COUNTY

Ashley Nursing & Convalescent Home
R. R. 6, Frankfort
Mr. and Mrs. Francis Hladik, Adms.

Bisel Nursing Home
551 E. Walnut St., Frankfort
Mr. B. H. Bisel, Adm.

Brown's Christian Nursing Home
R. R. 1, Michigantown
Mrs. Irene Brown, Adm.

Mulberry Lutheran Home, Inc.
State Route 38, W. Jackson St., Mulberry
Rev. Russell Bussabarger, Adm.

Newton Convalescent Home
1201 E. Washington St., Frankfort
Miss Westine Newton, R.N., Adm.

Rice Nursing Home
R. R. 1, Michigantown
Clayton and Marie Rice, Adms.

Shoemaker Memorial Home
951 E. Clinton St., Frankfort
Rev. R. E. Nibarger, Adm.

Summers Convalescent Home
552 S. Columbia St., Frankfort
Florence B. Summers, Adm.

DAVIESS COUNTY

Colvin's Nursing Home
1109 National Highway, Washington
Mrs. Laura Colvin, Adm.

Godwin Nursing Home
819 Axtell Ave., Washington
Mrs. Lelah Godwin, Adm.

Meyer's Nursing Home
215 W. Oak St., Washington
Rosetta Meyers, Adm.

DEARBORN COUNTY

Shady Nook Convalescent Home
Ridge Ave. & Catalpa St., Lawrenceburg
Mrs. Alta McMullen, Adm.

DECATUR COUNTY

Ada Schwind Nursing Home
469 S. Monfort St., Greensburg
Mrs. Ada Schwind, Adm.

Jessup Nursing Home
Westport, Indiana
Mrs. Myrtle Jessup, Adm.

Jessup Nursing Home #2
303 Jackson St., Greensburg
Margaret F. VanBriggle, Adm.

Michigan Hill Nursing Home
320 S. Michigan Ave., Greensburg
Paul E. and Ann L. Johnson, Adms.

Odd Fellows Home
R. R. 8, Greensburg
William F. Hamilton, Adm.

Slone's Nursing Home
515 W. Main St., Greensburg
Mrs. Marie Slone, Adm.

DEKALB COUNTY

Barkley Nursing Home
610 S. Broadway, Butler
Audrey E. Barkley, Adm.

Betz Nursing Home
R. R. 3, Auburn
Mr. and Mrs. Everett Betz, Adms.

Butler Hotel Rest Home
117 North Broadway St., Butler
Dorothy Dickerhoof, Adm.

Garrett Convalescent Home
611 S. Peters St., Garrett
Mr. and Mrs. Carlson Platz, Adms.

Sheehy Nursing Homes, Inc.
402 N. Broadway St., Butler
Flo Sheehy, Adm.

Southview Rest Home
131 Depot St., Butler
Marjorie Harrold, Adm.

DELAWARE COUNTY

Bethel Nursing Home
R. R. 7, Muncie
Mrs. Emogene Turner, Adm.

Eads Nursing Home
R. R. 7, Muncie
Mrs. Epsy W. Eads, Adm.

Faulkner Rest Home
905 South Grant St., Muncie
Edgar Faulkner, Adm.

Frazee Convalescent Home
R. R. 2, Dunkirk
Bliss Frazee, Adm.

Golden Rule Nursing Home
410 N. Madison St., Gaston
Mrs. Eunice A. Messersmith, L.P.N., Adm.

Maple Grove Convalescent Home
1347 East Jackson St., Muncie
Pearl B. Harty, Adm.

Maple Lane Convalescent Home
816 E. Adams, Muncie
Nila M. Harty, Adm.

Morgan-Nickols Convalescent Home
727 Wheeling Ave., Muncie
Mrs. Margaret L. Nickols, Adm.

Shady Haven Rest Home
R. R. 6, Muncie
Mrs. Leila C. Wilcox, Adm.

Sylvester Home for the Aged
R. R. 5, Burlington Dr., Muncie
Mrs. Nellie V. Sylvester, RN, Adm.

Woodland Home #1
917 E. Main St., Muncie
Mrs. Hazel Wilson, RN, Adm.

Woodland Home #2
1612 W. Jackson, Muncie
Mrs. Hazel Wilson, RN, Adm.

DUBOIS COUNTY

Indiana Rest Home
115 East 5th St., Jasper
Mrs. Matilda Sauter, Adm.

Jasper Nursing Home
102 W. 7th St., Jasper
Mrs. Lola M. Wehrle, Adm.

Providence Home
West 9th Street, Jasper
Rev. Phillip Ottavi, Adm.

St. Ann Nursing Home
511 Fourth St., Huntingburg
Sister M. Josepha, O.S.B., Adm.

ELKHART COUNTY

The Austin Home
526 N. 6th St., Goshen
Mrs. Hazel M. Neibert, Adm.

Gay Peterson Nursing Home
302 E. Lincoln Ave., Goshen
Iva Gay Peterson, Adm.

Hutchinson Nursing Home
302 S. 6th St., Goshen
Mrs. Irene Hutchinson, Adm.

Ideal Rest Home
925 Monroe St., Elkhart
Mrs. Bonnie Sills, Adm.

Lu-Ann Nursing Home
952 West Walnut St., Nappanee
Mrs. Lucille Sechrist, R.N., Adm.

Milleman Convalescent Home
430 W. Marion St., Elkhart
Mr. and Mrs. Harold Milleman, Adms.

Nicholson Convalescent Home
2400 Elkhart Rd., Goshen
George and Gracia Nicholson, Adms.

Pleasant View Rest Home
328 W. Franklin St., Elkhart
Mr. and Mrs. Harry Glant, Adms.

Rest Haven Nursing Home
803 Wolf Ave., Elkhart
Mrs. Elizabeth Calabrese, Adm.

Riley Convalescent Home
527 S. Main St., Goshen
Albert and Eunice Riley, Adms.

Simpson Nursing Home
114 S. 6th St., Goshen
Mr. Richard A. Simpson, Adm.

Continued

NURSING HOMES
Continued

Thorp Nursing Home
621 East Vistula St., Bristol
Mrs. Ruth Thorp, Adm.

Westview Convalescent Home
2600 S. Morehouse Ave., Elkhart
Robert W. McElwain, Adm.

Wilson Nursing Home
901 S. 2nd St., Elkhart
Mrs. Neva B. Wilson, Adm.

FAYETTE COUNTY

Lincoln Manor Nursing Home
903 Lincoln Ave., Connersville
Chester C. O'Neal, Adm.

Paula-Mar Rest Home
607 Eastern Ave., Connersville
Mrs. Mary M. Harvey, Adm.

Paula-Mar Nursing Home
319-21 Western Ave., Connersville
Paul E. and Mary M. Harvey, Adms.

FLOYD COUNTY

Happy Haven Rest Home
911 E. Spring St., New Albany
Donald Napper, Adm.

Kingston Nursing Home
1317 Culbertson, New Albany
Mrs. Bessie Kingston, Adm.

Turley's Nursing Home
1003 E. Main St., New Albany
Mrs. Anna C. Turley, Adm.

FOUNTAIN COUNTY

Alward Nursing Home
605 Summit St., Attica
Mr. and Mrs. Leston Alward, Adms.

Rudisill Nursing & Convalescent Home
303 Second St., Covington
Owen G. Rudisill, Adm.

FRANKLIN COUNTY

Echo Hill Nursing Home
R. R. 2, Laurel
Myrtle Jackson, Adm.

Elsie Dreyer Nursing Home #3
273 Main St., Brookville
Miss Elsie Dreyer, Adm.

FULTON COUNTY

Miller's Nursing Home
719 Madison St., Rochester
Helen Miller, Adm.

Pontius Nursing Home
426 Jefferson St., Rochester
Paula Pontius, Adm.

Rochester Nursing Home
1118 Main St., Rochester
Gerald L. Eastburg, Adm.

GIBSON COUNTY

Church Nursing Home
417 W. Broadway, Princeton
Mrs. Edra E. Waldron, Adm.

Colonial Nursing Home
314 N. West St., Princeton
Mrs. B. Mitchell, Adm.

Hottel Nursing Home
East Main St., Francisco
Mrs. Ralph L. Hottel, Sr., Adm.

King's Nursing Home
600 Strain St., Ft. Branch
Bessie King, Adm.

Maxey Nursing Home
Main St., Box 53
Haubstadt
Pearless and Marie Maxey, Adms.

Oakland City Rest Home
114 Grove St., Oakland City
Mrs. Ruth M. Morton, Adm.

Shady Grove Nursing Home
Francisco
Mrs. Ruth Morris, Adm.

GRANT COUNTY

Calbert's Rest Home
204 N. Washington St., Marion
Wanda Whitaker, Adm.

Calbert Nursing Home, Inc.
221 N. Washington St., Marion
Shirley Dean Brown, Adm.

Ellen Hill Home
710 W. 3rd St, Marion
Opal E. Calbert, Adm.

Friendship Heights
704 S. Main St., Fairmount
Jess and Margaret Lyons, Adms.

Jones Convalescent Home, Inc.
518 W. 36th St., Marion
Carroll M. Jones, Adm.

Jones Nursing Home
P. O. Box 102, Fowlerton
Mr. Carroll Jones and Betty Jones, Adms.

The Naber House
324 S. Main St., Fairmount
Miss Della Bickel, RN, Adm.

GREENE COUNTY

Glenburn Rest Haven
Glenburn Rd., R. R. 2, Linton
Miss Nola D. Yoder, Adm.

HAMILTON COUNTY

Arcadia Rest Home
P.O. Box 458, 405 S. East St.
Arcadia
Mrs. Florence Sigler, Adm.

Hamilton Rest Home
15755 Allisonville Rd., Noblesville
Mrs. Mary E. McKinley, Adm.

Lakeview Guest Home
R.R. 1, Box 15, Carmel
Seth Wells, Adm.

Sunderman Nursing Home
69 N. Harrison St., Cicero
Mr. and Mrs. Bernard Sunderman, Adms.

HANCOCK COUNTY

Pleasant Acres
R. R. 12, Box 320, Indianapolis
Mr. and Mrs. Frederick M. Burns, Adms.

Twinbrook, Inc.
R. R. 4, Box 66, Greenfield
James L. Kavalaris, Adm.

Wood Nursing Home
14 N. Wood St., Greenfield
Mrs. Hazel E. Wood, Adm.

HARRISON COUNTY

The Capitol Rest Home
408 N. Capitol Ave., Corydon
Mary E. Dailey, Adm.

HENDRICKS COUNTY

Danville Nursing Home
64 N. High St., Danville
Mrs. Pearl Perkins, Adm.

Golden Rule Nursing Home
147 S. Wayne St., Danville
Robert and Ethel Petree, Adms.

Vinewood Nursing Home
404 North Vine St., Plainfield
Stephen Snyder, Adm.

HENRY COUNTY

"The Boxwoods" Nursing Home
115 N. 10th St., New Castle
Mrs. Margaret Harris, Adm.

Hammond Nursing Home
806 W. Broad St., New Castle
Betty I. Hammond, Adm.

Middletown Nursing Home
130 S. 10th St., Middletown
Robert I. Clevenger, Adm.

New Hope Nursing Home
Lewisville
Mrs. Mildred King, Adm.

Rest Haven
420 S. Main St., New Castle
Dorothy Shipp, Adm.

HOWARD COUNTY

Colonial Haven Nursing Home
613 E. Superior St., Kokomo
Mrs. May Kennedy, Adm.

Hillcrest Nursing Home
1210 E. Jefferson St., Kokomo
Mrs. Sarah Naomi Miller, Adm.

Lucy Cole Nursing Home
332 W. Markland, Kokomo
Mrs. Lucy Cole, Adm.

Pleasant Rest Nursing Home
508 W. Taylor Street, Kokomo
Mr. and Mrs. Homer Johnson, Adms.

Samaritan Home of Kokomo, Inc.
513 East Vaile Ave., Kokomo
Sister Raphael, Adm.

HUNTINGTON COUNTY

Hillcrest Nursing Home
959 Guilford, Huntington
Jeanette Crumley, Adm.

Moore Nursing Home
425 Hasty St., Huntington
Mrs. Maud Moore, Adm.

Our Golden Years Home
442 Grayston Ave., Huntington
Mrs. Charles J. Smith, Adm.

Roanoke Nursing Home, Inc.
743 North Main Street, Roanoke
Mr. and Mrs. Robert Barna, Adms.

Town & Country Nursing Home
Goshen Rd., Huntington
Mr. and Mrs. H. B. Lunsford, Adms.

JACKSON COUNTY

Rose Lawn Home
202 W. 6th St., Seymour
Mr. and Mrs. Lowell E. Martin, Adms.

Rose Lawn Home Annex
305 St. Louis Ave., Seymour
Mrs. Esta T. Martin, Adm.

West Side Nursing Home
108 South Pine St., Seymour
Mrs. Jennie West and Harriette Rebholz, Adms.

JASPER COUNTY

Remington Rest Home
Illinois & Minnesota Sts., Remington
E. Max Sullivan, Adm.

JAY COUNTY

Portland Nursing Home, Inc.
406 W. Arch St., Portland
Mrs. Mary Ellen Hearn, Adm.

JEFFERSON COUNTY

Hilltop Rest Home
352 Miller, Madison
Mrs. Louise Obertate, Adm.

Madison Nursing Home
726 W. Main St., Madison
Mrs. Ella Shuell, RN, Adm.

JOHNSON COUNTY

Faith Home
P. O. Box 65, Edinburg
Mr. Raymond C. Brown, Adm.

Greenwood Hilltop Nursing Home
R. R. 2, Fry Rd., Greenwood
Mrs. Violet Van Sickle, Adm.

Hardin's Nursing Home
400 Kentucky St., Franklin
Mr. and Mrs. James Hardin, Adms.

Indiana Masonic Home
Franklin
Roy O. Turner, Adm.

Janie's Nursing Home
651 S. State St., Franklin
Mrs. Janie Johnson, Adm.

Methodist Home for the Aged
Franklin
A. M. Brown, D.D., Adm.

The Welcome Nursing Home
1109 N. Main St., Franklin
Stephen J. Snyder, Adm.

KNOX COUNTY

Ideal Nursing Home
402 Broadway, Vincennes
Mrs. Cora Thornberry Joyce, Adm.

Moore's Nursing Home
204 W. 3rd St., Bicknell
Mr. and Mrs. Ernest P. Moore, Adms.

Turner Nursing Home
515 Perry St., Vincennes
Clyde Turner and Marylee Turner, R. N., Adms.

Vincennes Nursing Home
703 Prairie St., Vincennes
Joe and Fern Junod, Adms.

KOSCIUSKO COUNTY

Alfran Nursing Home
2501 East Center St., Warsaw
Frank N. Wilson and Alice Wilson, R.N., Adms.

Hillcrest Manor Nursing Home
519 W. Winona Ave., Warsaw
Mrs. Evelyn Nolan, Adm.

Kilgore Nursing Home
R. R. 1, Pierceton
Mrs. Violet Kilgore, Adm.

Orn Nursing Home
North Main St., Milford
Mrs. Amos Orn, Adm.

Prairie View Rest Home, Inc.
300 Prairie St., Warsaw
Hazel Bradbury, Adm.

LAGRANGE COUNTY

Mark's Nursing Home
R. R. 1, LaGrange
Mrs. Marie B. Marks, Adm.

LAKE COUNTY

Blair Nursing & Convalescing Home
7606 Rhode Island Ave., Hammond
Mrs. Mary Ann Blair, Adm.

Calloway Nursing Home
1948 Massachusetts St., Gary
Tomye D. Calloway, Adm.

Calloway Nursing Home
1558 Fillmore St., Gary
Mrs. Tomye D. Calloway, Adm.

Gary Convalescent Home
386 Mount St., Gary
Mr. Joseph Shapiro, M.D., Adm.

Gearlds Rest Home
726 Sibley St., Hammond
Mrs. Vida Gearlds, Adm.

Great Oaks Manor Convalescent Home
R. R. 1, Box 30, Cedar Lake
William J. Moodie and Virginia Moodie, R.N., Adms.

Green Nursing Home
3960 Massachusetts St., Gary
Mrs. Lillian Green, Adm.

Hilltop Nursing Home
R. R. 2, Box 279, Crown Point
David Beggs and Olive Beggs, Adms.

Continued

NURSING HOMES
Continued

Laura S. Beaton Home
521 Pennsylvania St., Gary
Mrs. Laura S. Beaton, Adm.

Maplecrest Nursing Home
P. O. Box 114, St. John
George and Cecelia Klisurich, Adms.

Miller Nursing Home
2301 Adams St., Gary
Miss Ida Miller, Adm.

Mills Rest Home
5011 Maryland St., Gary
Mrs. Audrey Mills, Adm.

St. Ann's Home
5927 Columbia Ave., Hammond
Sister Mary Laura, Adm.

St. Anthony's Convalescent Home
R. R. 1, Box 262, Crown Point
Sister Mary Ottilia, Adm.

S & S Nursing Home
1944 Maryland St., Gary
Mrs. LaGora Sanders and Anna L. Simmons, Adms.

Shady Heights
R. R. 1, Box 46, Dyer
Mrs. Faye McGuire, Adm.

West End Nursing Home
1501 Wheeler St., Gary
Henderson D. Hall, Adm.

West Side Nursing Home
829 W. 3rd St., Gary
Mr. Stuart Primack, Adm.

Willowdale Convalescent Home
R. R. 2, Box 410, Crown Point
Donald D. DuSold, M.D., Adm.

Woodmar Nursing Home
6727 Baring Ave., Hammond
Mrs. Geraldine Wiseley, Adm.

LAPORTE COUNTY

Anderson Sanitarium
504 I St., LaPorte
Carroll and Lula Anderson, Adms.

Schofield Home
602 Spring Street, Michigan City
Mrs. Florence D. Schofield, Adm.

Waterford Nursing Home
R. R. 3, Box 319, Michigan City
LeRoy A. and Georgia Wimer, Adms.

White Tower Nursing Home
209 State Street, LaPorte
Mrs. Jane E. Gittings, Adm.

LAWRENCE COUNTY

Gladys' Nursing Home
51 East 16th St., Bedford
Mrs. Gladys Keller, Adm.

Oolitic Rest Home
North Lafayette St., Oolitic
Mrs. Edna Perry, Adm.

Rest Haven Nursing Home
1010 W. Frank St., Mitchell
Mrs. Kathleen King and Mrs. Dorothy Sheeks, Adms.

Sunny Acres Rest Home
R. R. 5, Bedford
Mrs. Mabel Ray, Adm.

MADISON COUNTY

Abshire Nursing Home
416 W. 12th St., Anderson
Mr. and Mrs. William M. Sanders, Adms.

Bradford Nursing Home
625 W. Adams St., Alexandria
Mrs. Alma Bradford, Adm.

Bright Memorial Nursing Home
2006 Jackson St., Anderson
Evelyn E. Teter, Adm.

Dickey Nursing Home
220 North 9th Street, Elwood
Mrs. Louise Dickey, Adm.

Goble Home
332 W. 11th St., Anderson
Martha Keller, Adm.

Miramar Nursing Home
1901 N. "A" St., Elwood
James G. Dickey, Adm.

New Haven Nursing Home
1023 E. 8th St., Anderson
Mrs. Josephine Wade, L.P.N., Adm.

Northside "900"
900 North J and 9th, Box 204, Elwood
Charles A. Dickey, Adm.

Rahbek Nursing Home
711 W. 5th St., Anderson
Mrs. Rosemary L. Williamson, R.N., and Jack V. Williamson, Adms.

Scott Nursing Home
339 S. Broadway, Pendleton
Mrs. Ruby Scott, Adm.

Shipley's Nursing Home
2417 Pearl St., Anderson
Mrs. Mildred Shipley, Adm.

MARION COUNTY

Ada's Golden Age Sanitorium
2115 Central Ave., Indianapolis
Mrs. Ada Mohler, Adm.

Alpha Home for Aged
1840 Senate Ave., Indianapolis
Mrs. Maude Gaillard, Adm.

Anthony Hall Sanitorium of Peoples Christian Church Disciples of Christ
2135 N. Alabama St., Indianapolis
Rev. James W. Jones, Adm.

The Barton House
505 N. Delaware, Indianapolis
Stephen J. Snyder, Adm.

Bel-Terrace Nursing Home
1629-33 N. College Ave., Indianapolis
Stephen Joseph Snyder, Adm.

Booker-Watts Convalescent Home
1409 Bellefontaine St., Indianapolis
Mrs. Geneva B. Watts, Adm.

Booker-Watts Convalescent Home
812 E. 14th St., Indianapolis
Mrs. Geneva B. Watts, Adm.

Borinstein Home for Jewish Aged, Inc.
3516 Central Ave., Indianapolis
Charles Cohen, Adm.

Broad Brook Restorium
1445 Broadway, Indianapolis
Mrs. Nora Brooks, Adm.

Central Nursing Home
2262 Central Ave., Indianapolis
Mrs. Bertha Flagle, Adm.

Christen Nursing Home
1930 Sugar Grove Ave., Indianapolis
Mrs. Ethel Christen, Adm.

Conner Nursing Home
1408 N. Pennsylvania St., Indianapolis
Mrs. Lucy V. Conner, Adm.

Dumas Nursing Home
2712 N. Illinois, Indianapolis
Mrs. Mary Lou Dumas, R.N., Adm.

Evangelistic Center, Inc.,
3518 Shelby, Indianapolis
Rev. E. P. Qualls, Adm.

Frame Nursing Home
373 N. Holmes Ave., Indianapolis
Mr. and Mrs. Bert Frame, Adms.

Garfield Park Nursing Home
2605 Shelby Street, Indianapolis
Mrs. Thelma Bryant, Adm.

Garner's Nursing Home
1402 Carrollton Ave., Indianapolis
Mrs. Elizabeth Garner, Adm.

Harris Sanatorium, Inc.
4601 N. Keystone, Indianapolis
John G. Harris, Adm.

Hillside Nursing Home
2370 Hillside Ave., Indianapolis
Mrs. Bennie Mason, Adm.

Huff's Sanitarium
115 S. Audubon Rd., Indianapolis
Mrs. Bettina Sullivan, Adm.

The Lou-Wise
2516 Central Ave., Indianapolis
Mrs. Bessie Cook, Adm.

Lynhurst Nursing Home
5225 W. Morris St., Indianapolis
Mrs. Ethel L. M. Herron, Adm.

Marie Fred Nursing Home
604 N. Jefferson Ave., Indianapolis
Mrs. Marie Fred, RN, Adm.

Martin's Convalescent Home
1621 Park Ave., Indianapolis
Lucille Martin, Adm.

Midland House, Inc.
3302 Washington Blvd., Indianapolis
Mr. Thomas C. Keller, Adm.

Montbrun Nursing Home, Inc.
1812 Central Ave., Indianapolis
Marie M. Montbrun, Adm.

New Hope
41 West 32nd St., Indianapolis
Mrs. Julia M. Carelli, L.P.N., Adm.

New View Nursing Home
1429 Carrollton Ave., Indianapolis
Mrs. Maude E. Weaver, Adm.

Northwestern Convalescent Home
2413 Northwestern Ave., Indianapolis
James H. McKenzie, Adm.

Penn Rest Home
2014 N. Pennsylvania, Indianapolis
Susie Goff, Adm.

People's Nursing Home
2354-56 N. College Ave., Indianapolis
Rev. James and Marceline Jones, RN, Adms.

Petty's Nursing Home
2432 Central Ave., Indianapolis
Gailord S. and Elsie Petty, Adm.

Pike Sanitarium
2037 N. Illinois St., Indianapolis
Susie M. Goff, Adm.

Pleasant View Rest Home
5000 Southeastern Ave., Indianapolis
Mrs. Laura E. Weber, Adm.

Robinson's Private Home
2254 Central Ave., Indianapolis
Mrs. Eunice Robinson, Adm.

St. Paul Baptist Church Home for the Aged
1141-45 N. Sheffield Ave., Indianapolis
Rev. C. J. Dailey, Adm.

St. Paul Hermitage
501 N. 17th St., Beech Grove
Sister M. Bernice Kavanaugh, O.S.B., Adm.

Sarah's Nursing Home
2716 Sutherland Ave., Indianapolis
Sarah Hill, Adm.

Springer's Nursing Home
6566 W. Washington St., Indianapolis
Millard and Gladys Springer, Adms.

Sunshine Nursing Home
4416 E. Washington St., Indianapolis
Mrs. Ethel M. Bills, Adm.

Three Sisters Nursing Home
124 W. 26th St., Indianapolis
Esther, Etta and Horty Springfield, Adms.

Vollmer Convalescent Home
2630 College Ave., Indianapolis
Mr. Emory H. Vollmer, Adm.

Mabel S. Waddle Private Home
2112 N. Delaware St., Indianapolis
Mrs. Mabel S. Waddle, Adm.

Ward Nursing Home
1518 N. Senate Ave., Indianapolis
Mrs. Willa Mae Murray, Adm.

Weber Convalescing Home
43 S. Ritter Ave., Indianapolis
Mrs. Laura E. Weber, Adm.

Wert Nursing Home
1716-18 N. New Jersey, Indianapolis
Mrs. Edith M. Wert, Adm.

Wooldridge Nursing Home
624 E. 12th St., Indianapolis
Al A. Wooldridge, Adm.

MARSHALL COUNTY

Harris Nursing Home
145 S. Michigan St., Argos
Carol Harris, Adm.

I.B.M. Nursing Home
1029 W. Jefferson St., Plymouth
Mrs. Iva B. Miller, Adm.

Landis Nursing Home
115 S. Maple Ave., Argos
Nerla L. Dykes, Adm.

Myers Nursing Home
R. R. 3, Box 159, Bremen
Mrs. Pearl Myers, L.P.N., Adm.

MARTIN COUNTY

O'Maley Rest Home
R. R. 4, Loogootee
Fred W. O'Maley, Adm.

MIAMI COUNTY

Armstrong's Park View Rest Home
402 Armstrong Ave., Peru
Zella C. Armstrong, Adm.

Church of the Brethren Home, Inc.
Mexico
Orville Sherman, Adm.

The Miami Home
77 E. 3rd St., Peru
Mrs. H. Lucille McDaniel, Adm.

Peru Nursing Home
906 W. Main St., Peru
Margaret Harris and Mrs. Maxine Watts, Adms.

Continued

NURSING HOMES
Continued

MONROE COUNTY

Lemble Nursing Home
R. R. 7, Box 297, Bloomington
Mrs. Judith Lemble, Adm.

Percifield Nursing Home
1031 W. 6th St., Bloomington
Lucille Bales, Adm.

MONTGOMERY COUNTY

Ben Hur Home
1375 S. Grant, Crawfordsville
Martha E. Williams, Adm.

Hazel Small Rest Home
N. Vine St., Waynetown
Lee Small and Sarah Small, Adms.

Laura M. Bowles Convalescent Home, Inc.
1304 S. Grant Ave., Crawfordsville
Richard Bowles, L.P.N., Adm.

MORGAN COUNTY

Cherry Nursing Home
60 E. Harrison St., Martinsville
Mrs. Zepha Cherry, Adm.

Sullivan Nursing Home
Box 162, Morgantown
Mrs. Marjorie Sullivan, Adm.

NOBLE COUNTY

C. J. Hocker Memorial Nursing Home
Wolflake
Patricia Phalen, Adm.

Golden Rule Nursing Home
R. R. 1, Pierceton
H. F. and Eva Mock, Adms.

Jaquay's Nursing Home
324 Silver St., Kendallville
Mrs. Leone Jaquay, Adm.

Kondas Nursing Home
R. R. 1, Albion
Steve and Julia Kondas, Adms.

Lutheran Old People's Home, Inc.
612 E. Mitchell, Kendallville
Rev. Herbert L. Wiese, Adm.

Sacred Heart Home
R. R. 2, Avilla
Sister Anna Marie, Adm.

Saint Vincent Home for the Aging
R. R. 1, Ligonier
Sister M. Agatha, RN, Adm.

ORANGE COUNTY

Gorge Nursing Home, Inc.
R. R. 2, French Lick
Mrs. Gertrude Haynes, RN, and Myrtle Simpson, R.N., Adms.

OWEN COUNTY

Donna Nursing Home #2
R. R. 2, Spencer
Clyde and Ursela Poff, Adms.

Gosport Nursing Home
W. Main St., Gosport
Mrs. Mary F. Wampler, Adm.

Reapp Nursing Home
P. O. Box 87, Spencer
Mrs. Jennie C. Reapp, Adm.

PARKE COUNTY

Allen Nursing Home
303 Howard Ave., Rockville
James F. Allen, Adm.

Ball Nursing Home
517 Ohio St., Rockville
Margaret Ball, Adm.

Bishop's Nursing Home
South Main St., Box 58
Bloomingdale
Darrell H. Bishop, Adm.

Britton's Parke County Nursing Home
R. R. 2, Rockville
Mrs. Helen Britton, Adm.

Layman Nursing Home
603 S. Washington, Montezuma
Mrs. Mildred Layman, Adm.

Sanders Nursing Home
Mecca, Indiana
Russell and Hazel Sanders, Adms.

Wabash Valley Nursing Home
934 N. Jefferson St., Montezuma
D. D. and Ellen N. Lee, Adms.

PIKE COUNTY

Fay's Convalescent Home
210 S. 14th St., Petersburg
Mrs. Fay France, Adm.

Petersburg Rest Home
1002 Main St., Petersburg
Donna M. Cooper, Adm.

PORTER COUNTY

Beverly Shores Nursing Home, Inc.
Beverly Shores
Mr. John W. Bragg, Adm.

Valparaiso Nursing Home
359 Greenwich St., Valparaiso
Mrs. Marie Goble, Adm.

POSEY COUNTY

Allison Nursing Home
Locust St., Poseyville
Mrs. Lula Allison, Adm.

Burton Nursing Home
North St., Cynthiana
Mr. and Mrs. Robert Burton, Adms.

Mt. Vernon Nursing Home
831 Mulberry St., Mount Vernon
Rena Green, Adm.

PUTNAM COUNTY

Craver Nursing Home
"E" Street, Greencastle
Mrs. Hannah Craver, Adm.

Donna Nursing Home #1
Main St., Cloverdale
Ursula Poff, Adm.

Eventide Rest Home
R. R. 2, Greencastle
Mrs. Daisy L. Sult, R.N., and Cletus O. Sult, Adms.

Ruark Nursing Home
R. R. 1, Fillmore
Mrs. Elsie C. Ruark, Adm.

RANDOLPH COUNTY

Golden Rule Rest Home
300 S. Meridian St., Winchester
Bernice E. Puterbaugh, R.N., Adm.

Lamb's Nursing Home
R. R. 4, Union City
Mrs. Bernice A. Lamb, Adm.

Parrott's Home
304 W. Sherman St., Lynn
Willie R. Parrott and Mary Maxine Parrott, Adms.

RIPLEY COUNTY

Elsie Dreyer Nursing Home #1
South Main St., Sunman
Miss Elsie Dreyer, Adm.

Elsie Dreyer Nursing Home #2
R. R. 1, Sunman
Miss Elsie Dreyer, Adm.

Gilland Nursing Home #1
310 Cravens St., Osgood
Mr. and Mrs. Dan Gilland, Adms.

Gilland Nursing Home #2
120 E. Ripley St., Osgood
Mr. and Mrs. Dan Gilland, Adms.

Gilland Nursing Home #3
Glasgow and Willson, Osgood
Mr. and Mrs. Dan Gilland, Adms.

Health and Hospitality Center
Carr St., Milan
Alfred J. Colson, Adm.

Twilight Haven Convalescent Home
High Street, Versailles
Freeda Hensley, Adm.

RUSH COUNTY

Hillside Haven
424 North Perkins St., Rushville
Mrs. Mary Todd, R.N., Adm.

Jackson Nursing Home
114 E. 5th St., Rushville
Mrs. Goldie Jackson and Mrs. Marjorie Pearsey, Adms.

Rushville Nursing Home
321 N. Morgan St., Rushville
Mrs. Marjorie Fordyce, Adm.

Williams Nursing Home
230 E. 7th St., Rushville
Joseph and Barbara Williams, Adms.

SHELBY COUNTY

Ace Placid Home
R. R. 1, Fairland
Dewey F. Murphy, Adm.

Maples Convalescent Home
R. R. 1, Fountaintown
Mr. Max D. McGraw, Adm.

Shelbyville Rest Home
125 W. Washington, Shelbyville
Laura Oma Gosch, Adm.

Waldron Nursing Home
Main St., P. O. Box 127, Waldron
Mrs. Evelyn V. Nasby, RN, Adm.

SPENCER COUNTY

Boyd Nursing Home
513 Walnut St., Rockport
Mrs. Mamie Boyd, Adm.

Ophelia Rest Home
807 Main St., Rockport
Mrs. Ophelia Moore, Adm.

ST. JOSEPH COUNTY

Barbara Morrow Home
1107 S. Main St., South Bend
Mrs. Barbara Morrow, Adm.

Calvert Convalescent Home
1844 E. Calvert, South Bend
Mildred Feldbauer, R.N., Adm.

Cardinal Convalescent Center, Inc.
118 S. Williams St., South Bend
Dorothy Berger, R.N., Adm.

Dor-A-Lin, Inc.
1024 N. Notre Dame Ave., South Bend
Mr. Edward L. Finkenbinder, Adm.

Farris Nursing Home
1021 W. Washington St., South Bend
Mrs. Helen M. Farris, Adm.

Gugle Nursing Home
714 West Oak St., South Bend
Myrtle B. Joyce, Adm.

Hall Nursing Home
702 S. Columbia St., South Bend
Mrs. Harriet L. Hall, Adm.

Haven Hubbard Memorial Home
New Carlisle
Mearl L. Dustin, Adm.

Hillview Convalescent Home
601 Russell St., Mishawaka
Mrs. Rosabelle Buck, Adm.

Krogh Nursing Home
109 N. Cedar St., Mishawaka
Mrs. Joyce Wood, Adm.

Nemeth Nursing Home
1145 W. Napier St., South Bend
Mrs. Peggy Nemeth, Adm.

River Park Nursing Home
2706 Wall St., South Bend
William G. Swintz and Thomas E. Squibb, Adms.

Rockhill Nursing Home
1526 Lincoln Way West, South Bend
Mrs. Lillie A. Rockhill, Adm.

Sunnybrook Nursing Home
605 Portage Ave., South Bend
Mrs. Pauline Luther, Adm.

Terry King Nursing Home #1
816 W. Colfax, South Bend
Mrs. Helen Laisure, Adm.

Terry King Nursing Home #2
832 W. Colfax, South Bend
Mrs. Helen Laisure, Adm.

Terry King Nursing Home #3
1209 S. Union, Mishawaka
Gloria McCullough, Adm.

Walkerton Nursing Home
500 Roosevelt Road, Walkerton
Virginia Waldron, Adm.

Wilton Nursing Home
25419 St., Rt. 2, South Bend
Mr. William Grzywinski, Adm.

STARKE COUNTY

Healthmore Nursing Home
P. O. Box 103, Hamlet
Paul Q. Zellers and Berniece Zellers, R.N., Adms.

Little Company of Mary Hospital and Home for Chronically Ill., Inc.
Route 421, San Pierre
Mother M. Catherine, Adm.

Ruff Nursing Home
Culver Road, Knox
Mrs. Levert Ruff, Adm.

STEUBEN COUNTY

Adams Nursing Home
314 W. Broad St., Angola
Mrs. Lois June Adams, Adm.

Angola Rest Home, Inc.
306 N. Wayne St., Angola
Mrs. Ruth G. Libby, Adm.

Underwood Nursing Home
Box 8, Defiance St., Pleasant Lake
Mr. and Mrs. Paul Underwood, Adms.

TIPPECANOE COUNTY

Burnett Nursing Home
221 S. Ninth St., Lafayette
Mrs. Maude L. Golden, Adm.

Continued

NURSING HOMES
Continued

Campbell Nursing Home
641 New York St., Lafayette
Mrs. Alma Campbell, Adm.

Comfort, Inc.
312 N. 8th St., Lafayette
Allen C. Campbell and Clara E. Campbell, R.N., Adms.

Indiana Knights of Pythias Home, Inc.
1501 South 18th Street, Lafayette
Mr. Clarence Hole, Adm.

Laura M. Bowles Convalescent Home
147 Ford St., Clarks Hill
Mrs. Laura M. Bowles, L.P.N., Adm.

Pickett Nursing Home
1021 N. 7th St., Lafayette
Mrs. Verna I. Pickett, Adm.

Pleasant Valley Guest Haven
Box 307, Battle Ground
Mrs. Ruth Hays, Adm.

Scott Nursing Home
1100 N. 9th St., Lafayette
Mrs. Goldie Scott, Adm.

Scott Nursing Home for Men
614 N. 8th St., Lafayette
Mrs. Goldie Scott, Adm.

TIPTON COUNTY

The Higgins Home
R. R. 1, State Road 19, Tipton
Mr. and Mrs. Robert D. Higgins, Adms.

UNION COUNTY

Lemmons Nursing Home
208 Line St., Liberty
Neva P. Lemmons, Adm.

Llewellyn Nursing Home
Mound and Center Sts., West College Corner
Mrs. Vera Llewellyn, Adm.

Park Manor Home
409 E. Union St., Liberty
Mrs. Neva P. Lemmons, Adm.

VANDERBURGH COUNTY

Bethany Rest Home
316 N. Wabash Ave., Evansville
Edith Masterson Poole, Adm.

Bethel Sanitarium, Inc.
800 Mary Street, Evansville
Mrs. Louise Kuiken, RN, Adm.

Bethel Sanitarium, Inc.
6015 Kratzville Rd., Evansville
Mrs. Louise Kuiken, RN, Adm.

Bethel Sanitarium, Inc., Annex
5827 Kratzville Rd., Evansville
Mrs. Louise Kuiken, RN, Adm.

Braun's Nursing Home
909 First Ave., Evansville
Mr. and Mrs. Roy Braun, Adms.

Dorsey Nursing Home
1714 S. Governor St., Evansville
Mrs. Laura Dorsey, Adm.

Evans Nursing Home
605 Oak St., Evansville
Mrs. Anna Evans, Adm.

Gee's Rest Home
807-11 S. E. 3rd St., Evansville
Mrs. Thelma Shaw, Adm.

Gertha's Nursing Home
605 Oakley St., Evansville
Mrs. Gertha Hendrickson, Adm.

Good Samaritan Home
601 N. Boeke, Evansville
Rev. Martin P. Kniker, Adm.

Kueber Nursing Home
816 First Avenue, Evansville
John and Catherine Kueber, Adms.

M & R Nursing Home
1100 N. Read St., Evansville
Mrs. Muriel Sprinkle, L.P.N., Adm.

Newton Rest Home
921-23 S. Elliott St., Evansville
Mrs. Gwendolyn Newton, Adm.

Pine Haven
3401 Stocker Dr., Evansville
Mrs. Anita M. Stocker, RN, Adm.

Regina Pacis Home
3900 Wash. Ave., Evansville
Rev. James R. Deneen, Adm.

Stinson Rest Home
315 S. E. 2nd St., Evansville
Mrs. Mildred Stinson, Adm.

Tri-State Community Rest Home
821 Judson Street, Evansville
Myrtis Palmer, Adm.

VERMILLION COUNTY

Dana Convalescent Home
Dana
Louise Barton, Adm.

Layman Nursing Home
432 S. 5th St., Clinton
Mrs. Mildred Layman, Adm.

VIGO COUNTY

Cook Nursing Home
2058 N. 7th St., Terre Haute
Mrs. Grace E. Cook, Adm.

Fields Residential Home
1334 Sycamore St., Terre Haute
Emma Fields, Adm.

Ideal Rest Home
1452 Chestnut St., Terre Haute
Clarence and Evelyn Wallace, Adms.

Mary Etta Nursing Home
1524 Third Ave., Terre Haute
Mrs. Mamie Mason, Adm.

Sharps Nursing Home
1432 N. Center St., Terre Haute
Mrs. Hazel M. Sharps, Adm.

Sullivan Nursing Home
705 S. 7th St., Terre Haute
Mrs. Grace F. Sullivan, Adm.

Trainer Nursing Home
1915 N. 11th St., Terre Haute
Mrs. Geneva Trainer, Adm.

Wallace Nursing Home
502 N. 8th St., Terre Haute
Mrs. Evelyn Wallace, Adm.

Wallace Sanitorium
2144-8th Ave., Terre Haute
Mrs. Evelyn Wallace, Adm.

WABASH COUNTY

The Estelle Peabody Memorial Home
7th and Buffalo, North Manchester
William Visser, Adm.

Friendly Nursing Home, Inc.
1420 Quaker Ave., Wabash
Mrs. Jean Leakey, Adm.

Gore's Nursing Home
1250 Pike St., Wabash
Chester M. Gore, Adm.

Parrett Nursing Home
213 E. Hill St., Wabash
Wilmer Parrett and Kathleen Parrett, L.P.N., Adms.

Pleasant View Nursing Home
R. R. 2, Wabash
Virgil L. and Lois M. Sweares, Adms.

WARRICK COUNTY

Baker's Rest Haven
503 West Walnut, Boonville
Mrs. Viola Baker, Adm.

Hollis Nursing Home
R. R. 5, Boonville
Mr. and Mrs. Harvey Hollis, Adms.

Shady Rest Nursing Home
Outer State Street, Chandler
Gilbert and Pearl Bradfield, Adms.

WASHINGTON COUNTY

Williams Nursing Home
R. R. 3, Scottsburg
Mrs. Kathleen Williams, Adm.

WAYNE COUNTY

Bowman's Rest Home
500 W. Main St., Cambridge City
Mrs. Esther Bowman, Adm.

Friendship Home
306 S. 10th St., Richmond
Grace Flatley, Adm.

Gains Nursing Home
R. R. 2, Richmond
Mrs. Emma Gains, Adm.

Glen Aire Nursing Home
2116 E. Main St., Richmond
Helen Marshall and Eileen Singleton, Adms.

Golden Rule Nursing Home #1
48 S. 7th St., Richmond
Hilda Stull, L.P.N., Adm.

Golden Rule Nursing Home #2
320-22 N. 10th St., Richmond
Hilda Stull, L.P.N., Adm.

Mary E. Hill Nursing Home for Aged Colored Women, Inc.
2308 Zoar Ave., Richmond
Howard Alexander, Adm.

Molchin Nursing Home
801 W. Main St., Hagerstown
Mrs. Florence Molchin, Adm.

Pinehurst Nursing Home
R. R. 1, Centerville
Betty Hilland and Bonnie Cole, Adms.

Pleasant View Nursing Home
R. R. 1, Box 237, Centerville
Betty Hilland and Bonnie Cole, Adms.

Twin Pines Nursing Home
Main St., Economy
Mrs. Elizabeth Johnson, Adm.

WELLS COUNTY

Clark's Nursing Home
522 E. South St., Bluffton
Mrs. Clara Clark, Adm.

Cooper Rest Home
306 W. Wabash Ave., Bluffton
Mrs. Janet E. Cooper, RN, Adm.

Davis Nursing Home
627 S. Marion St., Bluffton
Mrs. Helen Davis, Adm.

Southview Rest Home
R. R. 3, Box 306, Bluffton
Mrs. Cora N. Anderson, Adm.

WHITE COUNTY

Archibald Memorial Home for Aged Deaf
R. R. 2, Brookston
Leroy Turner, Adm.

Monticello Nursing Home, Inc.
226 N. Illinois St., Monticello
Gerald L. Eastburg, Adm.

WHITLEY COUNTY

Farris Nursing Home
209 W. Market St., Columbia City
Mrs. Louise Farris, LPN, Adm.

Hillcrest Home
710 W. Ellsworth St., Columbia City
Mr. and Mrs. Herman O. Oelschlager, Adms.

South Whitley Rest Home, Inc.
306 Columbia St., South Whitley
Katherine A. Bresnahan, RN, Adm. ◄

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*Poison Control Centers in Indiana**

and Adjacent States

City	Name and Address	Telephone	Director
Anderson	St. John's Hickey Memorial Hospital 127 West 19th Street	3-3391	Sister Mary, Administrator
Angola	Cameron Memorial Hospital, Inc. 416 E. Maumee	Angola 1000	Irene Kenyon, R.N. Roger Commager, Pharmacist
Bedford	Dunn Memorial Hospital 1616 23rd Street	BRowning 5-3331, Ext. 32	Marshall S. Wallner, Pharmacist
East Chicago	St. Catherine Hospital 4321 Fir Street	EXport 7-3080	Jack M. Troy, M.D.
Elkhart	Elkhart General Hospital 600 East Boulevard	3-5350, Ext. 224	C. Richard Yoder, M.D.
Evansville	Protestant Deaconess Hospital 600 Mary Street	HArrison 5-7171, Ext. 247	Edward J. Wolfgang, Pharmacist
Evansville	St. Mary's Hospital, Inc. 3700 Washington Avenue	GReenleaf 7-1541, Ext. 328	Kenneth Wilhelmus, M.D.
Evansville	Welborn Memorial Baptist Hospital, Inc. 412 S. E. Fourth Street	HArrison 3-3103	R. K. Glenn, Pharmacist
Fort Wayne	Parkview Memorial Hospital 2200 Randalia Drive	Eastbrook 7431, Ext. 522	William O. Wissman, Pharmacist
Fort Wayne	St. Joseph Hospital 730 West Berry Street	ANthony 4121, Ext. (Emergency Room)	Miss Angeline Holbrook, R.N.
Frankfort	Clinton County Hospital 1300 S. Jackson Street	4451	Fred W. Flora, M.D.
Gary	Methodist Hospital of Gary, Inc. 1600 West 6th Avenue	TUrner 3-0491	Glen T. Dresher, R.N.

*Attention: Physicians, Hospitals and Poison Control Centers

If you are faced with a poison emergency, and are unable to locate information on the ingredients of the "household product", in your own reference file or the nearest poison control center—remember you can call the Poison Information Center, Indiana State Board of Health as they maintain an extensive file on "Trade Name Products" due to the registration law, (Indiana Hazardous Household Product Act of 1959).

City	Name and Address	Telephone	Director
Goshen	Goshen General Hospital 200 High Park Avenue	KEystone 3-2141 (Emergency Room)	Neil Harris, M.D.
Hammond	St. Margaret Hospital 25 Douglas Street	WEstmore 2-2300	Herbert I. Arbeiter, M.D.
Indianapolis	Marion County General Hospital 960 Locke Street	MElrose 6-6331, Ext. 211 or 212	Richard W. Dyke, M.D.
Indianapolis	Methodist Hospital of Indiana, Inc. 1604 North Capitol Ave.	WAlnut 4-6411, Ext. 752, 753 or 754	Jack Hall, M.D.
Indianapolis	St. Francis Hospital North 17th Avenue Beech Grove, Indiana	STate 4-2474	H. N. Grimes, M.D.
Indianapolis	*Poison Information Center Indiana State Board of Health 1330 West Michigan Street	MElrose 3-6510 Office Hours MElrose 3-4360 After Hours, Week Ends, Holidays (If no answer on MElrose 3-6510, call MElrose 3-4360)	
Kokomo	Howard Community Hospital 3500 S. Lafountain	GL 7-6611	Don E. Gillaspy, Pharmacist
Lafayette	St. Elizabeth Hospital 1021 N. 14th Street	SH 2-0221 Ext. 313 or 317	Jack Burnett, Pharmacist
West Lafayette	Purdue University Student Health Center	92-2446	Loyal W. Combs, M.D.
LaGrange	LaGrange County Hospital R. R. #1	HO 3-2144	Merle V. Rawson, Pharmacist
Lebanon	Witham Memorial Hospital 1124 N. Lebanon Street	LEbanon 143 or 2447, Ext. 44	Thomas Dillon, M.D., Sponsor, Vivian Berhr, R.N., Ralph N. Clark, R.Ph.
Madison	The King's Daughters' Hospital 112 Presbyterian Ave.	1331	Ann L. Breitenbach, R.N., Director of Nurses
Marion	Marion General Hospital Wabash and Euclid Avenue	North 4-2313, Ext. 44 or 45	A. B. Snowhite, M.D.

* Informational services only

City	Name and Address	Telephone	Director
Mishawaka	St. Joseph Hospital 215 West 4th Street	BLackburn 9-1431	Abner H. Levkoff, M.D.
Muncie	Ball Memorial Hospital 2401 University Avenue	AT 4-3371 Ext. 241	Walter G. Ebert, Administrator
Portland	Jay County Memorial Hospital 505 West Arch Street	37 or 38	Forrest E. Keeling, M.D.
Richmond	Reid Memorial Hospital Spring Grove	2-4091, Ext. 222	Mrs. Jessie Snyder, R.N., Head Nurse—Emergency Room
Shelbyville	William S. Major Hospital 150 W. Washington Street	EX 8-6661	Carolyn Rosenfeld, R.N.
South Bend	Memorial Hospital of South Bend Poison Control Center 615 North Michigan Street	CEntral 4-9041, Ext. 232	Harriet Hanley, M.D.
South Bend	St. Joseph Hospital 811 East Madison Street	CEntral 4-2151	Leslie M. Bodnar, M.D.
Terre Haute	Union Hospital, Inc. 1606 N. Seventh Street	CRawford 5006, Ext. (Emergency Room)	Joseph P. Gillotte, M.D.
Tipton	Tipton County Memorial Hospital 1032 S. Main Street	OSburn 5-2156	George L. Compton, M.D.
Whiting	Whiting Clinic 1900 Indianapolis Blvd.	Whiting 2075	Jack M. Troy, M.D.

ADJACENT STATES

ILLINOIS

Chicago	Poison Control Center Presbyterian—St. Luke's Hospital 1753 W. Congress Parkway	SEeley 8-4411 Ext. 2322	Joseph Christian, M.D.

KENTUCKY

Louisville	Poison Control Center Department of Pediatrics 323 E. Chestnut St.	JUniper 2-1831	Thomas A. Courtenay, M.D.

MISSOURI

St. Louis	Poison Control Center Cardinal Glennon Memorial Hospital for Children 1465 S. Grand Ave.	MOhawk 4-7222 Ext. 216	James P. King, M.D.
	Poison Control Center St. Louis Children's Hospital 500 S. Kingshighway	FOrest 7-6880	J. Neal Middelkamp, M.D.

City	Name and Address	Telephone	Director
	OHIO		
Cincinnati	* Poison Control Center Cincinnati Academy of Medicine 320 Broadway	AV 1-6161	John A. Williams, M.D.
Columbus	Poison Control Center Children's Hospital 17th St. at Livingston Park	CLearbrook 8-9783	William O. Robertson, M.D.

* Informational services only

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DISEASE PREVENTION by Immunization and Chemoprophylaxis*

Disease	*Agent Used*	*Recommended For*	*Method of Administration*	*Type of Immunity*	*Duration of Protection*	*Booster Injection*
Chalero	Cholero Vaccine	Adults	—0.5 cc. subcutaneously followed by 1.0 cc. in 7 days.	Active	6 months	0.12-1.0 cc. according ta age every six months in endemic areas.
		Children: 6 months to 2 years 3-6 yeors 7-10 yeors 11 years ond older	Three subcutaneous injections given 7-10 days interval. (1) 0.06 cc.; (2) 0.12 cc.; (3) 0.12 cc. (1) 0.12 cc.; (2) 0.25 cc.; (3) 0.25 cc. (1) 0.25 cc.; (2) 0.5 cc.; (3) 0.5 cc. Adult schedule			
Diphtheria	Diphtherio Antitoxin	All early cases	Usually intromuscular if seen within 48 hours af onset. *Warning:* Test for sensitivity ta horse serum. Moy be used intravenously in severe nosophorynx coses. Dosage dependent an degree af toxicity rother than oge ond weight. 10,000 units to 75,000 units.	Passive	Short	Additional antitoxin given dependent upon illness and taxicity.
Diphtheria	Diphtheria Toxoid (fluid or olum precipitoted ar aluminum phosphote adsorbed, for odult use)	Children alder thon 11 years and odults	Two intromusculor injections of 0.5 cc. each, four ta six weeks apart for primary immunization or if individuol has not hod a booster dose of vaccine for 3 years.	(If toxoid is given then octive immunity develops.)	Indefinite	0.5 cc. every year.
Diphtheria	Diphtheria-Pertussis-Tetonus alum precipitoted or aluminum hydroxide (or oluminum phosphote) adsorbed diphtheria ond tetonus toxoids; contoining 12 protective antigenic units of vaccine per 1.5 cc. (DPT)	Children under 5 years	(1) First dose of 0.5 cc. deep intramuscularly—follow injection with 0.1-0.2 cc. air. Given 1-3 months oge. (2) Secand dose of 0.5 cc. deep intromusculorly one month after first dase. (3) Third dose of 0.5 cc. deep intramuscularly ane month after 2nd dose. (4) If 1st dose given earlier than 3 months of oge, then give fourth dose 2-3 manths after series completed.	Active	Indefinite	D. P. T. baaster of 0.5 cc. at 12 to 18 months ond 4-5 years. After 5 years baaster dose of 0.5 cc. Diphtheria Tetanus Taxoid every 3 years to age 11 yeors.
Diphtheria	Diphtherio Tetonus Toxoid alum precipitoted or aluminum hydraxide (ar aluminum phasphote) adsorbed.	Children aver 5 years ond up ta 10 yeors	(1) First dose of 0.5 cc. deep intramuscularly, follow injectian with 0.1-0.2 cc. air. (2) Second dose af 0.5 cc. deep intromusculorly—follow injection with 0.1-0.2 cc. air.	Active	Indefinite	Diphtheria Tetanus booster 0.25 cc. to 0.5 cc. *Cautian:* Do not give to children post 10 years of age.

Diphtheria	Diphtheria Taxoid Pertussis Vaccine Tetanus Taxaid Fluid	Rapid immunization af children under 10 years	Three doses af 0.5 cc. given subcutaneausly at intervals of 3-4 weeks. In face of epidemic injectians may be given at ane week intervals.	Active	Antigenic respanse lower than with the alum preparatians and daes nat last as lang.	0.5 cc. every 2 years.
Diphtheria	Diphtheria Toxaid Tetanus Taxoid Fluid	Rapid immunization under 10 years	Three doses 0.5 cc. given subcutaneously at intervals af 3-4 weeks. In face of epidemic injectians may be given at intervals of one week.	Active	Antigenic response lawer than with alum preparations and daes nat last as long.	0.5 cc. every 2 years.
Hepatitis, Infectiaus (Epidemic)	Immune Serum Glabulin (Gamma Glabulin)	All exposed in hausehald, institution, etc.	Dasage: 0.01 cc. per pound af bady weight. Given intramuscularly.	Passive	Brief	Repeat each expasure.
Influenza	Polyvalent Vaccine	Use during epidemics		Active (in 70% + immunized)	Shart: 3-4 manths	Repeat primary injectian and/or injectians annually.
		Children	Give tatal af 1.0 cc. in the caurse of one week.			
		Adults—especially all with chranic debilitating disease of heart and lungs.	1.0 cc. subcutaneausly. *Warning:* Precautians must be taken in individuals sensitive to egg pratein. *(Nate:* There is less chance af lacal ar systemic reaction if only 0.1 cc. is given intradermally far a tatal af 2 doses 7-10 days apart).			
Measles* (Rubeala)	Immune Serum Glabulin (Gamma Glabulin)	Complete passive immunity children under ane year; children ill with chranic disease or healthy child whose siblings are ill with chranic disease	Dasage 0.2 cc. per paund af body weight given priar ta 6th day after exposure. Given intramuscularly.	Passive	Very brief	Repeat each expasure.
		Incamplete immunity ar modificatian in all ather children	Dosage 0.05 cc. per paund of bady weight before 6th day after expasure; if given after 6th day use dase af 0.1 cc. per paund of bady weight. Given intramuscularly.	Partial passive. Child has modified disease and develaps active immunity	Far life if disease was modified and nat prevented.	
Measles, German (Rubella)	Immune Serum Glabulin (Gamma Globulin)	Pregnant females expased during the first trimester	Dasage: 0.1 cc. per paund of bady weight. Given intramuscularly.	Passive	Very brief	Repeat each exposure if pregnant.

* Measles Vaccine—The measles vaccines have just been licensed. There are two vaccines available: (1) A live attenuated vaccine. One dose of vaccine is given by intramuscular route. It is recommended that gamma globulin be administered at the same time to modify reactions to the vaccine. (2) Inactivated vaccine is given in three doses at monthly intervals. A third method of immunization is pending. This consists of two doses of killed vaccine followed by ane dose of live, attenuated vaccine. Vaccines are too new to establish longevity of immunity at this time. Consult the manufacturers.

Disease	Agent Used	Recommended For	Method of Administration	Type of Immunity	Duration of Protection	Booster Injection
Meningococcic Meningitis	Sulfadiozine	Control of exposed persons in community groups Children up to 11 yrs.	0.5 m. twice doily for 2 doys.	None Chemicol prophy-loxis only	Very brief—for one exposure only.	Repeot following eoch exposure.
		Adults (ond children 12 yrs. or over)	1.0 gm. twice doily for 2 doys.			
Mumps	Mumps Voccine	Adults exposed to cose and with negative history of hoving hod mumps	*Warning:* Check on sensitivity to egg protein. Two injections given 5 to 10 doys apart of 1.0 cc. eoch subcutoneously.	Active	Brief	Previously immunized persons moy be given booster dose of 0.5 to 1.0 cc. subcutoneously.
Pertussis	Pertussis Voccine soline suspended (See Double ond Triple ontigens under "Diphtherio")	Children during epidemic	A totol of 12 N. I. H. units divided into 3 equol doses of 4 N. I. H. units (0.5 cc.) given subcu-toneously ot intervols of one week.	Active	Indefinite	1 yeor ofter primory series, 2 years after primory series ond then every three yeors to 6 or 7 yeors of age.
	Pertussis Voccine alum precipitoted or oluminum hydroxide odsorbed (See Double ond Triple antigens under "Diphtheria")	Routine immunizotion of infonts when DPT is contraindicoted	A totol of 12 N. I. H. units divided into 3 equol doses of 4 N. I. H. units eoch (0.5 cc.) injected intromusculorly ot intervols of 4 to 6 weeks.	Active	Indefinite	18 months—3-4 yeors. 6-7 years usuolly given os DPT.
		Exposure Recall		Active	Indefinite	4 NIH units (0.5 cc.) soline suspension subcu-toneously if child hos not had immunizotion past 2 yeors.
Plogue	Plogue Vaccine— o suspension of 2000 million killed Posteur-ello per milliliter	Epidemics ond areos with high endemic rate. Adults: Children: 6 months-2 yeors 2 yeors-6 yeors 6 yeors-10 years	Two injections subcutoneously 7-10 doys oport. First injection 0.5 cc.; second, 1.0 cc. 0.06 cc.; 0.12 cc; 0.12 cc. 0.12 cc.; 0.25 cc.; 0.25 cc. 0.25 cc.; 0.50 cc.; 0.50 cc.	Active Active	Portiol protection for period of 4-6 mos. Portiol protection for period of 4-6 mos.	1.0 cc. every 4 months as long as donger of epidemic exists. Booster dose for chil-dren is some os first dose of initiol series.
Poliomyelitis*	Poliomyelitis (Solk) Vaccine	All Ages	Two injections eoch 1.0 cc. given intromuscu-lorly ot interval of 3-6 weeks. Third injection of 1.0 cc. given 7 months ofter second.	Active	Not known (Solk hos demon-stroted odequote ontibodies present ofter 8 yeors)	Booster dose of 1.0 cc. recommended 8 to 12 months after 3rd dose. Additional boost-er doses odvised if in epidemic oreo.

* Poliomyelitis Vaccine, oral, live, attenuated—These vaccines are licensed. No description is given in the table as their use is largely recommended for mass immunization. The Indiana State Medical Association, the Indiana State Health Officers Association and the Indiana State Board of Health in October 1962 stated there was little need for mass oral programs and recommended no new programs be initiated.

Robies	Robies—hyperimmune serum 1000 units per pound of body weight Rabies Voccine 7-14 doses	*Licks* af abraded skin ar mucosa by praven robid, suspicious, escoped, killed or unknown onimol	Hyperimmune serum within 24-72 haurs of expasure. Follaw within 24 haurs with Robies Voccine.	Possive immunity from hyperimmune serum	Few weeks	Repeot initiol dose hyperimmune serum, but not ofter beginning Rabies Voccine series as serum will black ontibody praductian.
		Bites of healthy onimol, multiple, or face or heod bites	Hyperimmune serum. Stort voccine but stap if onimol remoins narmol far 3 doys.	Active immunity from robies voccine	Indefinite	Robies voccine prepared occording to Semple methad—should not repeot full course—one to 3 injectians probably sufficient. More hazordous Egg embryo voccine—give ane injectian.
		Bite of healthy onimol, other than heod or neck	No treotment. If onimol becomes suspicious during 14 days observation give serum and vaccine ot first suspicious signs.			
		Bites—onimal rabid, escaped, killed, unknown or ony bites by any wild animal	Stort treotment immediately, using hyperimmune serum followed by 7-14 doses voccine, depending upon whether single ar multiple bites and locotion.			
		Bat bites and exposure to bots	Start treotment with Rabies Voccine immediately withaut waiting for Labaratory Repart. Bots ore anly onimols known ta occosionally survive robies ond remain carriers.			
Rocky Mountoin Spotted Fever	Rocky Mauntoin Spotted Fever Voccine	Nat routinely recommended since odvent of specific ontibiatic therapy. Moy be used in oreos of high incidence omong persans af high risk.	Adults: 3 injections eoch 1.0 cc. subcutoneously ar intromusculorly ot intervols of one week. Children—under 10 years three injections each 0.5 cc. subcutoneausly ar intromusculorly ot intervols of one week.	Active	One yeor	1.0 cc. baaster annuolly
Smollpox	Smallpox Voccine (Voccinia virus)	Children and odults	Begin ot 5-12 months. Administered by multiple pressure technique skin aver insertian of left deltoid.	Active	Indefinite, overoge 3 yeors	Repeot every 4th yeor.
Tetonus	Tetonus Antitoxin	All coses of puncture wounds and animol bites when person hos not been immunized or more thon 2 years since last booster.	*Caution:* Skin test first far serum sensitivity. Intromusculor injectian of 10,000 units ontitaxin.	Passive	10 doys	Repeat with eoch injury. Because of hozord to horse serum octive immunization with toxaid preferred.

Disease	Agent Used	Recommended For	Method of Administration	Type of Immunity	Duration of Protection	Booster Injection
Tetanus	Tetanus Toxoid, depat (alum precipitated ar adsarbed) (See Double and Triple antigens under "Diphtheria")	All	Twa doses, each 0.5 cc. given intramuscularly, at least ane and preferably 2-3 manths interval.	Active	At least 4 years	0.5 cc. end first year, then—baaster every 2-4 years. Satisfactary recall response after 10 years but is too slow in case of injury. Emergency boaster if injured.
	Tetanus Taxaid, Fluid (See Dauble and Triple antigens under "Diphtheria")	All	Three dases, each 0.5 cc., subcutaneaulsy or intramuscularly at ane month and preferably 2-3 months between dases.	Active	At least 4 years	0.5 cc. end first year, then—baaster every 2-4 years. Satisfactory recall respanse after 10 years but is too slow in case of injury. Emergency booster if injured.
Typhaid Fever	Typhaid Vaccine Triple vaccine containing 1000 millian S. typhasa and 250 million each of paratyphaid A and B per cc.	All persons living in or traveling to areas where disease is endemic or insanitary conditians exist.	*Adults* Three dases, each 0.5 cc. subcutaneously nat less than 7 days or mare than 28 day intervals between doses. An alternate methad is: 0.1 cc.; 0.15 cc. and 0.2 cc. given intradermally not less than 7 nar mare than 28 days between dases. *Children* 6 mo.-2 yr.—(1) 0.06 cc.; (2) 0.12 cc.; (3) 0.12 cc. 2 yr.- 6 yr.—(1) 0.12 cc.; (2) 0.25 cc.; (3) 0.25 cc. 6 yr.-10 yr.—(1) 0.25 cc.; (2) 0.50 cc.; (3) 0.50 cc.	Active	Indefinite—usually at least ane year	Persans traveling or living in insanitary areas should receive boaster of 0.1 cc. intradermally or 0.5 cc. subcutaneausly annually. Children's annual baaster the same dase as initial dase of each series.
Typhus Fever	Typhus Fever Vaccine	All persans traveling to or living in areas where epidemic typhus exists.	*Adults* Twa dases, each 1.0 cc. at intervals of 7-10 days given subcutaneausly. Allergy to egg or chicken pratein anly contraindication. *Children* Three dases each: 6 mas.-2 yrs.: 0.12 cc. 2 yrs.- 6 yrs.: 0.25 cc. 6 yrs.-10 yrs.: 0.50 cc.	Active	Relative 3-6 manths	*Adults* Rautine every 6 manths dase af 1.0 cc. given subcutaneausly or whenever threat of outbreak accurs. *Children* Same dose as in initial series.
Yellaw Fever	Yellaw Fever Vaccine* (Obtainable only at U. S. P. H. S. Haspital or Yellow Fever Immunization Depots. See faotnote where obtainable in Indiana.)	All persans traveling in or thraugh or living in endemic areas. Shauld receive vaccine 10 days before arrival in area.	One dose 0.5 cc. of a 1:10 dilutian of cancentrated vaccine, freshly prepared. Given subcutaneausly. Shauld nat be given to persan ill with virus disease or at same time cowpax virus is given. Children's dose—same as adult.	Active	6 years or langer	As required at present every 6 years repeat immunization. In presence of epidemic repeat primary immunizatian.

*While many contraindications are listed for various biologicals it should be recognized that in the interest of brevity it was impossible to give all details. In case of doubt consult standard reference for detailed description of biological in question and/or pharmaceutical company's circular accompanying original package of biological.

All of the biologicals listed may be obtained through normal supply channels with the exception of Yellow Fever Vaccine. Because of hazards if yellow fever vaccine is improperly handled it can only be obtained from U. S. P. H. S. depots. In Indiana these depots are:

Indiana University Medical Center
1040 West Michigan Street
Indianapolis
Fridays, 11 a.m. to 12 noon CDT by appointment
Telephone: MElrose 5-8441, Ext. 441

Elkhart County Health Department
200 Harrison Street
Elkhart, Indiana
1st or 3rd Wednesday each month 2 p.m.
Telephone 26525

Physicians having patients requiring yellow fever immunization should advise person to call or write the above, as inoculations are given by appointment only on one day a week. There is a fee to cover vaccine and administration.

(Revised)

A. L. Marshall, Jr., M.D., *Director*
Division of Communicable Disease Control
Indiana State Board of Health ◄

Class A Narcotic Drugs

The following is a compilation of Class A Narcotic Drugs by Trade Name prepared by L. C. Heustis, Executive Secretary of the Indiana Pharmaceutical Association for publication. It is designed to aid physicians in determining the proper and legal methods of prescribing narcotics. A pharmacist is required by law to have in hand a properly completed prescription prior to the dispensing of any of the Class A narcotics. No verbal or phoned prescriptions are permitted in Class A. (As of March 1, 1963.)

Package	Class A Narcotics by Trade Name
Tab.	A.P.C. Demerol (Demerol 30 mg.)
Supp.	B&O 15A (Opium ½ gr., Belladonna ¼ gr.)
Supp.	B&O 16A (Opium 1 gr., Belladonna ¼ gr.)
	Chlor-Anodyne (Morphine Hcl. 2⅞ gr. per oz.)
	Cocaine Solutions
Solvets	Cocaine Hcl. 2¼ gr.
Amp.	Codeine Phos. ½ gr. per cc.
H.T.	Codeine Phos. ¼ gr.
H.T.	Codeine Phos. ½ gr.
H.T.	Codeine Phos. 1 gr.
D.T.	Codeine Sulf. 1 gr.
H.T.	Codeine Sulf. ⅛ gr.
H.T.	Codeine Sulf. ¼ gr.
H.T.	Codeine Sulf. ½ gr.
H.T.	Codeine Sulf. 1 gr.
T.T.	Codeine Sulf. ¼ gr.
T.T.	Codeine Sulf. ½ gr.
T.T.	Codeine Sulf. 1 gr.
	Codeine, if more than 8 grs. per fl. oz. or more than 1 gr. per dosage unit
	Demerol Solutions
Amp.	Demerol 25 mg.—½ cc.
Amp.	Demerol 50 mg.—1 cc.
Amp.	Demerol 75 mg.—1½ cc.
Amp.	Demerol 100 mg.
Amp.	Demerol Atropine 2 cc. (Demerol 100 mg—2 cc.)
Amp.	Demerol Scopolamine 2 cc. (Demerol 100 mg—2 cc.)
Elix.	Demerol (Demerol 50 mg. per 5 cc.)
	Demerol Disp. Syr. 50 mg.—1 cc.
	Demerol Disp. Syr. 75 mg.—1 cc.
	Demerol Disp. Syr. 100 mg.—1 cc.
Tab.	Demerol 50 mg.
Tab.	Demerol 100 mg.
Vial	Demerol 50 mg. per cc.
Vial	Demerol 100 mg. per cc.
Vial	Demerol Scopolamine (Demerol 50 mg. per cc.)
Tab.	Demerol APAP (Demerol 50 mg.)
Tab.	Demerol Comp. (Demerol 25 mg.)
Tab.	Demerol Lotusate (Demerol 100 mg.)
Tab.	Dicodid 5 mg.
Amp.	Dilaudid Hcl. 1/32 gr.—1 cc.
Amp.	Dilaudid Hcl. 1/20 gr.—1 cc.
Amp.	Dilaudid Hcl. 1/16 gr.—1 cc.
Rect. Supp.	Dilaudid Hcl. 1/20 gr.
Syr.	Dilaudid (1 mg.—5 cc.)
	Dilaudid Hcl. Solutions
H.T.	Dilaudid Hcl. 1/64 gr.
H.T.	Dilaudid Hcl. 1/32 gr.
H.T.	Dilaudid Hcl. 1/20 gr.
H.T.	Dilaudid Hcl. 1/16 gr.
Vial	Dilaudid Sulf. 2 mg. per cc.
	Dionin Solutions
Amp.	Dolophine Hcl. 10 mg.—1 cc. (Methadone Hcl.)
20 cc. Amp.	Dolophine Hcl. 10 mg. per cc.
Syr.	Dolophine Hcl. (Methadone Hcl. 10 mg. per 30 cc.)
Tab.	Dolophine Hcl. 5 mg.
Tab.	Dolophine Hcl. 7.5 mg.
Tab.	Dolophine Hcl. 10 mg.
Tab.	Donnagesic #2 (Codeine Phos. 1½ gr.)
	Dover's Po. N.F. (Po. Ipecac and Opium)
H.T.	H.M.C. #1 (Morphine HBr. ¼ gr.)
H.T.	H.M.C. #2 (Morphine HBr. ⅛ gr.)
	Hycodan Po.
10 cc. Vial	Hymorphan Hcl. 2 mg. per cc.

Package	Class A Narcotics by Trade Name
10 cc. Vial	Hymorphan Hcl. 2 mg. per cc. Atropine Sulf. 0.25 mg. per cc.
Amp.	Leritine 1 cc., 25 mg. per cc.
Amp.	Leritine 2 cc., 25 mg. per cc.
Tab.	Leritine 25 mg.
30 cc. Vial	Leritine 25 mg. per cc.
Amp.	Levo-Dromoran 2 mg.—1 cc.
Tab.	Levo-Dromoran 2 mg.
10 cc. Vial	Levo-Dromoran 2 mg. per cc.
Tubex	Meperidine Hcl. 50 mg.—1 cc.
Tubex	Meperidine Hcl. 75 mg.—1 cc.
Tubex	Meperidine Hcl. 100 mg.—1 cc.
Cap.	Mepergan
Cap.	Mepergan Fortis
Tubex	Mepergan 25—50 mg. per 2 cc.
10 cc. Vial	Mepergan 25—25 mg.—1 cc.
Tubex	Mepergan 50—50 mg.—1 cc.
10 cc. Vial	Mepergan 50—50 mg.—1 cc.
100 Tab.	Mercodinone
20 cc. Vial	Methadone Hcl. 10 mg. per cc.
30 cc. Vial	Methadone Hcl. 10 mg. per cc.
Syr.	Methajade
	Morphine Acetate
Elix.	Morphine Hcl. 1 gr. per fl. oz.
	Morphine Solutions
Amp.	Morphine Sulf. ¼ gr. per cc.
Amp.	Morphine Sulf. ¼ gr., Atropine Sulf. 1/150 gr. per cc.
H.T.	Morphine Sulf. ⅛ gr.
H.T.	Morphine Sulf. 1/6 gr.
H.T.	Morphine Sulf. ¼ gr.
H.T.	Morphine Sulf. ½ gr.
H.T.	Morphine Sulf. 1 gr.
H.T.	Morphine Sulf. ¼ gr., Atropine Sulf. 1/150 gr.
T.T.	Morphine Sulf. ¼ gr.
Amp.	Nisentil Hcl. 40 mg.—1 cc.
Amp.	Nisentil Hcl. 60 mg.—1 cc.
Vial	Nisentil Hcl. 60 mg. per cc.
Tab.	Nodalin (Methadone Hcl. 2.5 mg.)
Amp.	Numorphan Hcl. 1 cc. (1.5 mg per cc.)
Amp.	Numorphan Hcl. 2 cc. (1.5 mg. per cc.)
10 cc. Vial	Numorphan Hcl. (1.5 mg. per cc.)
Supp.	Numorphan Hcl. 2 mg.
Supp.	Numorphan Hcl. 5 mg.
	Opium Po.
	Opium Po. Extract
Rect. Supp.	Opium 1 gr. Belladonna ¼ gr.
Tr.	Opium U.S.P. Deod.
	Pantopon All
	Papine
Amp.	Prinadol 2 mg. 1 cc.
10 cc. Vial	Prinadol 2 mg. per cc.
Amp.	Spasmalgin 1 cc. (Pantopon 1/6 gr. Papaverine Hcl. 1/3 gr. 1 cc.)
Tab.	Spasmalgin (Pantopon 1/6 gr. Papaverine Hcl. 1/3 gr.)
Cap.	Synalgos DC (Dihydrocodeine 16 mg.)

*The 4 Narcotic Classes**

The Karsten narcotic law, which became effective January 1, 1961 has resulted in the division of all narcotic drugs as follows:

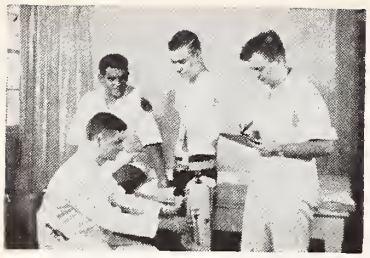
CLASS A—This is the old, original basic narcotic drug class, used to control products that have addiction liability. Preparations in this class are subject to the strictest controls all the way down the line. Examples would include Cocaine, Dolophine, Demerol, Morphine, Pantopon, etc. They cannot be dispensed without a written prescription, and, of course, cannot be refilled.

CLASS B—This group was established a few years ago when Congress authorized oral prescriptions for a limited group of narcotic drug-preparations. Included in this class are: Apomorphine, A. S. A. and Codeine Compounds, Copavin, Cotarnine, Dihydrocodeinone, Narcotine and Narceine. Dihydrocodeinone was transferred to this group from Class X and is no longer exempt.

CLASS X—This is the category of so-called exempts—narcotic preparations found by the federal narcotics bureau to have only a slight addition liability. Narcotic form order is not required.

CLASS M—This is the new control group, created under the Karsten law. Drugs in this class have no addiction liability, or less liability than those in Class X. Narcotic order not re-

Continued



advanced training for HANGER prosthetists

Certified Prosthetists from the various HANGER offices have attended courses on Upper- and Lower-Extremity Prosthetics ensuring that HANGER Clients receive the best Prosthetic Service possible. The courses are approved by the American Board for Certification and given at the U. of California at Los Angeles, Northwestern U. and at New York U., in cooperation with the Committee on Prosthetics Research and Development of the National Academy of Sciences. The use of the Adjustable Leg, the Patellar-Tendon Bearing Below Knee Prosthesis, and the "quadrilateral socket" were features of a recent series of intensive courses. The curriculum was centered around the Clinical Team (illustrated) usually composed of a physician, a prosthetist and a therapist and concerned with the integrated handling of each amputee case. Thus, doctors, interested in Prosthetics can be assured that HANGER Prosthetists are fully acquainted with the latest prosthetic methods.

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3108 Burnet Avenue, Cincinnati 29, Ohio
Fairfield at Pontiac, Fort Wayne, Ind.
416 N. Main St., Evansville, Ind.

NARCOTIC CLASSES

Continued

quired. This class was created by transferring preparations into it from Class B: combinations of non-narcotic ingredients with narcotine, papaverine, narceine, or cotarnine. However, pure narcotine, papaverine, narceine, cotarnine, and their salts remain as Class B drugs, to be dispensed only on prescription.

Watch the new labels. ◄

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We can adequately care for your convalescents and long term care patients, requiring intensive nursing care, any age. R.N.'s around the clock, L.P.N.'s also on duty. Necessary therapy, diets, intravenous, oxygen. All doctors welcome. Professional care in homelike atmosphere for those who demand and appreciate the best.

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In Sprains, Strains and Muscle Spasm, 'Soma' Compound

numbs the pain...not the patient

A potent analgesic and a superior muscle relaxant

1. A sprain or fracture is not a big clinical problem—but it does hurt. And if there is housework to do and kids to mind, the patient needs something to numb the pain.

2. A.P.C. compounds have limited usefulness; and the patient can buy them without your prescription. Unfortunately, most of them are too mild to be effective for sprains—and more potent products too often make the patient feel 'dopey'.

3. 'Soma' Compound is ideal in these cases. Since it contains both 'Soma' (carisoprodol) and acetophenetidin it is both a potent analgesic and a superior muscle relaxant; it also contains caffeine to offset any drowsiness *("numbs the pain...not the patient")*.

4. Why not try 'Soma' Compound? Dosage is 1 or 2 tablets q.i.d. For more severe pain, try 'Soma' Compound + Codeine. Dosage: 1 or 2 tablets q.i.d.

5. Hypersensitivity to carisoprodol may occur rarely. Codeine may produce addiction, nausea, vomiting, constipation or miosis.

Soma® Compound

carisoprodol 200 mg., acetophenetidin 160 mg., caffeine 32 mg.

Soma® Compound + Codeine

carisoprodol 200 mg., acetophenetidin 160 mg., caffeine 32 mg., codeine phosphate 16 mg. (Warning—may be habit forming.)

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Deaths of Indiana Physicians in 1962

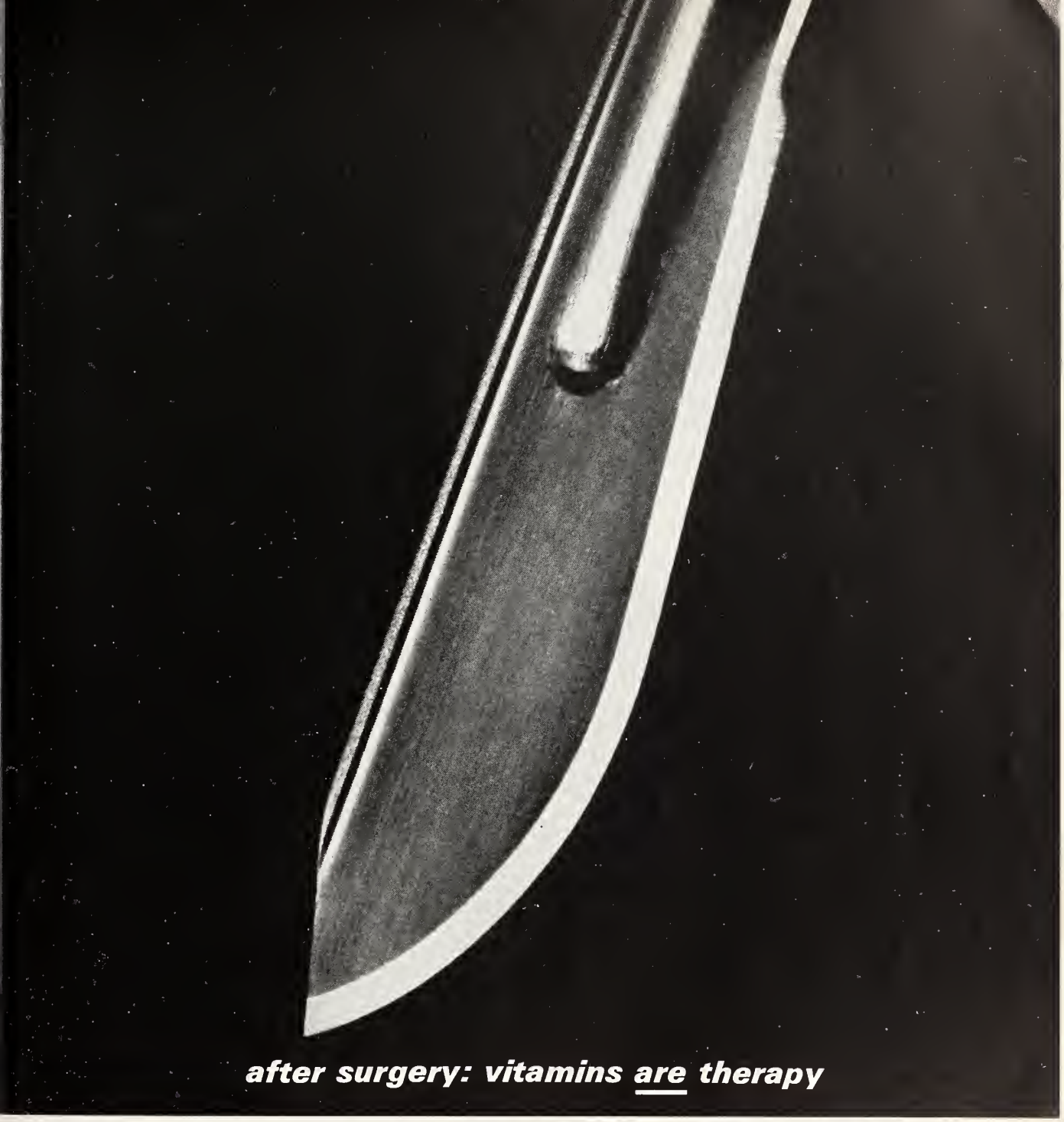
Compiled by James B. Maple, M.D., Necrologist

(M) Member ISMA, (S) Senior Member, (R) Retired

Name	Age	Date of Death	Address	Cause of Death
Rice, Wilkie B. (S)	79	Jan. 5	Fort Wayne	Chronic nephritis
Shields, Harry S.	80	Jan. 5	Brownstown	Status asthmaticus, pulmonary emphysema
Rainey, Everett A. (S)	84	Jan. 9	Lebanon	Cerebral apoplexy with left hemiplegia
Pennington, Walter E. (S)	73	Jan. 11	Indianapolis	Glioma of right frontal lobe. Brain stem pressure
Call, Earle B. (S)	76	Jan. 12	Knightstown	Cerebrovascular accident, arteriosclerosis. Hypertension
Walker, Robert K. (M)	61	Jan. 14	Indianapolis	Myocardial degeneration with decompensation
Stanton, James J.	81	Jan. 18	Logansport	Cerebral hemorrhage. Arteriosclerosis
Hawes, James K. (S)	87	Jan. 18	Columbus	Cerebral hemorrhage. Generalized arteriosclerosis
Murray, Dudley E.	78	Jan. 21	Roanoke	Cerebral thrombosis
Gatch, Willis D. (S)	84	Jan. 24	Indianapolis	Cerebral thrombosis. Arteriosclerosis
Hingeley, John E. (M)	46	Jan. 28	Butlerville	Metastatic carcinomatosis. Adenoma of transverse colon
Southworth, John W. (M)	42	Jan. 28	Speedway	Dissecting aneurysm. Hypertension
Jump, Charles A. (S)	81	Feb. 1	Selma	Myocardial infarction. Duodenal ulcer hemorrhage and shock
Cary, Willis W. (S)	92	Feb. 1	Fort Wayne	Chronic nephritis. Arteriosclerosis
Farley, Archibald H.	83	Feb. 6	Crown Point	Heart disease
Kern, Charles B. (S) (R)	89	Feb. 13	Noblesville	Acute coronary occlusion
Rettig, Arthur C. (M)	59	Feb. 16	Muncie	Cardiac arrest. Rheumatic valvular heart disease
Millam, Abraham	25	Feb. 17	Indianapolis	Skull fracture, auto wreck
Faulds, Mabel	80	Feb. 19	Gary	Arteriosclerotic heart disease
Merrell, Basil M. (M)	60	Feb. 21	Rockville	Coronary occlusion
Johnston, Alan (M)	46	Feb. 24	Martinsville	Acute myocardial infarction. Coronary sclerosis, hypertension
O'Malley, Martha A. (M)	52	Feb. 26	Indianapolis	Astrocytoma of brain
Wynne, Roland E. (S)	75	Feb. 26	Bedford	Arteriosclerotic heart disease. Diabetes mellitus
Cring, George V. (S) (R)	78	Feb. 28	Portland	Coronary occlusion. Arteriosclerosis
Fair, Herbert D. (S) (R)	94	Mar. 2	Muncie	Coronary occlusion. Congestive heart failure
Weist, Ebenezer P. (R)	89	Mar. 11	Richmond	Cardiac insufficiency. Arteriosclerotic heart disease
Vye, James P. (M)	61	Mar. 14	Gary	Postoperative shock. Bilateral herniorrhaphy
Earhart, Troy W. (R)	80	Mar. 20	Mulberry	Cerebrovascular accident
Sazama, Francis J. (M)	49	Apr. 11	Schererville	Auto wreck
Stout, Walter M. (S)	73	Apr. 4	Silver Lake	Myocardial infarction. Coronary thrombosis
Miller, Henderson L. (S)	86	Apr. 10	West Baden Springs	Adenocarcinoma of the stomach
Steffan, Arthur J. (M)	67	Apr. 14	Wabash	Myocardial infarction. Coronary artery disease
Cole, William J. (M)	54	Apr. 15	Evansville	Pneumonia. Myasthenia gravis
Clark, Stanley A. (S)	84	Apr. 17	South Bend	Acute bronchopneumonia
Clarke, Charles R.	85	Apr. 25	Auburn	Carcinoma of the colon. Arteriosclerotic heart disease
Dorman, Willis L. (M)	61	May 1	Indianapolis	Gunshot wound of the head
Wyeth, Charles (S) (R)	92	May 6	Terre Haute	Bacteremia, pneumonia, fracture of femur

Name	Age	Date of Death	Address	Cause of Death
Johnson, William A. (S)	78	May 12	Perrysville	Acute coronary thrombosis. Diabetes mellitus
Boardman, Carl (S) (R)	83	May 16	Gary	Coronary occlusion
Finot, Philip	79	May 25	Indianapolis	Myocardial infarction
McCabe, James E. (S)	87	June 3	Lafayette	Prostatic carcinoma
Spivey, Russell J. (M)	59	June 11	Indianapolis	Coronary occlusion
Fletcher, Charles F. (S) (R)	80	June 20	Sunman	Congestive heart failure
Steinkamp, Emil F. (S)	81	June 21	Huntingburg	Carcinoma of the bladder
Kimble, Fred A.	76	June 20	Shirley	Bronchopneumonia. Adenocarcinoma of the prostate
Banister, Revel H. (S)	78	June 28	Indianapolis	Aplastic anemia, malignant
Marsh, Chester A. (S)	75	June 30	Hagerstown	Acute myocardial infarction
Sullinger, Adron A. (M)	46	July 8	Vincennes	Drowned
Sponder, Joseph (S)	74	July 8	Gary	Diabetic crisis, heart failure, pulmonary congestion
Chidlaw, Benjamin W. (S)	82	July 11	Hammond	Thrombosis, left internal carotid artery
Dunn, Ferrell W. (S) (R)	79	July 17	Muncie	Cerebrovascular accident
Tinney, William E. (S)	84	July 17	Indianapolis	Cerebral thrombosis
Hickman, A. Lee, Jr. (M)	46	July 21	Hammond	Cerebral hemorrhage
Gill, Bernard P.	69	July 30	Chandler	Coronary thrombosis
Freed, John E. (S) (R)	74	Aug. 2	Terre Haute	Acute myocardial infarction. Diabetes mellitus
Jobes, Norman E. (S)	91	Aug. 4	Indianapolis	Generalized arteriosclerosis
Molloy, William J. (S) (R)	90	Aug. 10	Muncie	Cerebral arteriosclerosis
Kinnaman, Howard A. (M) (R)	68	Aug. 11	Crawfordsville	Carcinomatosis
Thom, Jay W.	67	Aug. 13	Indianapolis	Probable abdominal malignancy
Moser, Edward (S)	88	Aug. 14	Woodburn	Dissecting aneurysm of the aorta
Huddle, John R. (M)	44	Aug. 30	Indianapolis	Fall from a roof
Murphy, George M.	40	Sept. 1	Madison	Myocardial infarction
Kruse, Edward H. (S)	78	Sept. 1	Fort Wayne	Arteriosclerotic heart disease
Moran, Mark M. (S)	80	Sept. 1	Portland	Bronchopneumonia
Swan, Richard C. (M)	49	Sept. 2	Anderson	Ventricular tachycardia. Coronary artery disease
Baylor, Edward M. (S)	70	Sept. 3	Evansville	Cerebral thrombosis
Keller, Frank G. (S) (R)	94	Sept. 3	North Manchester	Cerebral hemorrhage
Parker, Joseph M.	40	Sept. 3	Indianapolis	Coronary occlusion
Clark, Cecil P. (M)	68	Sept. 8	Indianapolis	Coronary occlusion
Lochry, Ralph L. (S) (R)	74	Sept. 17	Indianapolis	Congestive heart failure. Arteriosclerotic heart disease
Glenn, Fred C. (S)	82	Sept. 18	Tell City	Acute myocardial infarction
Williams, Richard E.	37	Sept. 19	Lafayette	Acute coronary occlusion
Diefendorf, Charles F. (S)	87	Sept. 20	Evansville	Acute bronchopneumonia
Melloh, Ardis F. (M)	57	Sept. 21	Indianapolis	Hepatic coma, fatty metamorphosis liver, portal fibrosis liver
Rozelle, Clarence V. (M)	62	Sept. 21	Anderson	Acute coronary thrombosis. Diabetes mellitus
Weaver, William W. (M)	64	Oct. 2	New Albany	Cerebral thrombosis
Yoder, Albert C. (S) (R)	94	Oct. 3	Goshen	Cardiac decompensation
Berghoff, Raymond J. (M)	69	Oct. 4	Fort Wayne	Carcinoma of the colon
Cronick, Charles H. (M)	49	Oct. 6	Indianapolis	Barbiturate poisoning
McKeeman, Leland S. (M)	63	Oct. 7	Fort Wayne	Coronary thrombosis with infarction
McMillan, Frederick G. (S)	82	Oct. 12	Indianapolis	Congestive heart failure. Parkinson's disease
Woods, Halden C. (M)	48	Oct. 16	Markle	Auto wreck
Morris, Ludson D.	55	Oct. 16	Princeton	Ruptured abdominal aneurysm
Amy, William E. (S)	82	Oct. 17	Corydon	Arteriosclerotic heart disease
Seale, Joseph P.	86	Oct. 19	Fairmount	Cerebral vascular thrombosis
Davies, Robert R.	39	Oct. 28	New Castle	Coronary thrombosis
Bolin, John T. (S)	82	Oct. 29	Cedar Lake	Coronary occlusion

Name	Age	Date of Death	Address	Cause of Death
Hamilton, Emory D. (M)	49	Oct. 30	Fort Wayne	Bilateral lobar pneumonia
Pollard, Walter S. (S)	78	Nov. 5	Evansville	Carcinoma, right kidney
Holloway, William A. (S)	92	Nov. 18	Logansport	Hypostatic pneumonia
Slabaugh, Jancy S. (S)	88	Nov. 18	Nappanee	Automobile accident
Gerrish, Wakefield D. (S)	83	Nov. 23	Clinton	Arteriosclerotic heart disease
Danieleski, Ladislaus J. (M)	64	Nov. 24	Gary	Gastrointestinal hemorrhage. Diabetes mellitus
Carney, John C. (M)	58	Nov. 26	Monticello	Carcinoma of the lungs
Hadley, Harvey (S)	84	Nov. 28	Richmond	Cerebral thrombosis
DeRenne, William L. (M)	50	Nov. 28	Newport	Arteriosclerotic heart disease
Nagappan, Manikumari	30	Dec. 3	West Lafayette	Cyanide poisoning
Thrasher, John R. (S)	81	Dec. 5	Indianapolis	Cor-pulmonale
Frybarger, Samuel S. (R)	78	Dec. 5	Converse	Arteriosclerotic heart disease
Thomas, Thomas R. (M)	32	Dec. 10	Highland	Gunshot wounds
Daniels, Andrew R.	66	Dec. 12	Indianapolis	Coronary occlusion
McLaughlin, Calvin P. (M)	55	Dec. 13	Pendleton	Gunshot wound of the chest
Langdon, Harry K. (S)	88	Dec. 15	Indianapolis	Arteriosclerotic heart disease
Henly, Glenn (S)	92	Dec. 28	Fairmount	Encephalomalacia



after surgery: vitamins are therapy

Nutritional supplementation is basic to postoperative care. Therapeutic allowances of B and C vitamins help meet increased metabolic requirements and compensate for stress depletion. STRESSCAPS can set the patient on a more favorable course and contribute to full recovery.

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RECOMMENDATION ONLY

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STRESSCAPS®

Stress Formula Vitamins Lederle

Presidents of ISMA Since Its Organization

Medical Convention	Elected	Served
*Livingston Dunlap, Indianapolis	1849	1849
Medical Society		
*William T. S. Cornett, Versailles	1849	1850
*Ashahel Clapp, New Albany	1850	1851
*George W. Mears, Indianapolis	1851	1852
*Jeremiah H. Brower, Lawrenceburg	1852	1853
*Elizur H. Deming, Lafayette	1853	1854
*Madison J. Bray, Evansville	1854	1855
*William Lomax, Marion	1855	1856
*Daniel Meeker, LaPorte	1856	1857
*Talbot Bullard, Indianapolis	1857	1858
*Nathan Johnson, Cambridge City	1858	1859
*David Hutchinson, Mooresville	1859	1860
*Benjamin S. Woodworth, Ft. Wayne	1860	1861
*Theophilus Parvin, Indianapolis	1861	1862
*James F. Hibberd, Richmond	1862	1863
*John Sloan, New Albany	1863	----
*John Moffet (acting), Rushville	1863	1864
*Samuel L. Linton, Columbus	1864	----
*Wilson Lockhart (acting), Danville	1864	1865
*Myron H. Harding, Lawrenceburg	1865	1866
*Vierling Kersey, Richmond	1866	1867
*John S. Bobbs, Indianapolis	1867	1868
*Nathaniel Field, Jeffersonville	1868	1869
*George Sutton, Aurora	1869	1870
*Robert N. Todd, Indianapolis	1870	1871
*Henry P. Ayres, Ft. Wayne	1871	1872
*Joel Pennington, Milton	1872	1873
*Isaac Casselberry, Evansville	1873	----
*Wilson Hobbs (acting), Knightstown	1873	1874
*Richard E. Houghton, Richmond	1874	1875
*John H. Helm, Peru	1875	1876
*Samuel S. Boyd, Dublin	1876	1877
*Luther D. Waterman, Indianapolis	1877	1878
*Louis Humphreys, South Bend	1878	----
*Benj. Newland (acting), Bedford (v.p.)	1878	1879
*Jacob R. Weist, Richmond	1879	1880
*Thomas B. Harvey, Indianapolis	1880	1881
*Marshall Sexton, Rushville	1881	1882
*William H. Bell, Logansport	1882	1883
*Samuel E. Mumford, Princeton	1883	1884
*James H. Woodburn, Indianapolis	1884	1885
*James S. Gregg, Ft. Wayne	1885	1886
*General W. H. Kemper, Muncie	1886	1887
*Samuel H. Charlton, Seymour	1887	1888
*William H. Wishard, Indianapolis	1888	1889
*James D. Gatch, Lawrenceburg	1889	1890
*Gonsolvo C. Smythe, Greencastle	1890	1891
*Edwin Walker, Evansville	1891	1892
*George F. Beasley, Lafayette	1892	1893
*Charles A. Daugherty, South Bend	1893	1894
*Elijah S. Elder, Indianapolis	1894	----

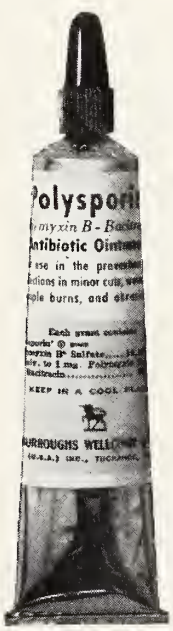
Medical Society	Elected	Served
*Charles S. Bond (acting), Richmond	1894	1895
*Miles F. Porter, Ft. Wayne	1895	1896
*James H. Ford, Wabash	1896	1897
*William N. Wishard, Indianapolis	1897	1898
*John C. Sexton, Rushville	1898	1899
*Walker Schell, Terre Haute	1899	1900
*George W. McCaskey, Ft. Wayne	1900	1901
*Alembert W. Brayton, Indianapolis	1901	1902
*John B. Berteling, South Bend	1902	1903
*Jonas Stewart, Anderson	1903	1904
*George T. MacCoy, Columbus	1904	1905
*George H. Grant, Richmond	1905	1906
*George J. Cook, Indianapolis	1906	1907
*David C. Peyton, Jeffersonville	1907	1908
*George D. Kahlo, French Lick	1908	1909
*Thomas C. Kennedy, Shelbyville	1909	1910
*Frederick C. Heath, Indianapolis	1910	1911
*William F. Howat, Hammond	1911	1912
*A. C. Kimberlin, Indianapolis	1912	1913
*John P. Salb, Jasper	1913	1914
*Frank B. Wynn, Indianapolis	1914	1915
*George F. Keiper, Lafayette	1915	1916
*John H. Oliver, Indianapolis	1916	1917
*Joseph Rilus Eastman, Indianapolis	1917	1918
*William H. Stemm, North Vernon	1918	1919
*Charles H. McCully, Logansport	1919	1920
*David Ross, Indianapolis	1920	1921
*William R. Davidson, Evansville	1921	1922
*Charles H. Good, Huntington	1922	1923
*Samuel E. Earp, Indianapolis	1923	1924
*Eldridge M. Shanklin, Hammond	1924	1925
*Charles N. Combs, Terre Haute	1925	1926
*Frank W. Cregor, Indianapolis	1926	1927
George R. Daniels, Marion	1926	1928
*Charles E. Gillespie, Seymour	1927	1929
*Angus C. McDonald, Warsaw	1928	1930
*Alois B. Graham, Indianapolis	1929	1931
Franklin S. Crockett, Lafayette	1930	1932
*Joseph H. Weinstein, Terre Haute	1931	1933
*Everett E. Padgett, Indianapolis	1932	1934
*Walter J. Leach, New Albany	1933	1935
*Roscoe L. Sensenich, South Bend	1934	1936
*Edmund D. Clark, Indianapolis	1935	1937
Herman M. Baker, Evansville	1936	1938
*Edmund M. Van Buskirk, Ft. Wayne	1937	1939
Karl R. Ruddell, Indianapolis	1938	1940
*Albert M. Mitchell, Terre Haute	1939	1941
Maynard A. Austin, Anderson	1940	1942
*Carl H. McCaskey, Indianapolis	1941	1943
*Jacob T. Oliphant, Farmersburg	1942	1944
*Neslen K. Forster, Hammond	1943	1945
*Jesse E. Ferrell, Fortville	1944	1946
*Floyd T. Romberger, Lafayette	1945	1947
*Cleon A. Nafe, Indianapolis	1946	1948

* Deceased.

Medical Society	Elected	Served
Augustus P. Hauss, New Albany	1947	1949
*C. S. Black, Warren	1948	1950
*Alfred Ellison, South Bend	1949	1951
*J. William Wright, Indianapolis	1950	1952
Paul D. Crimm, Evansville	1951	1953
Wm. Harry Howard, Hammond	1952	1954
Walter L. Portteus, Franklin	1953	1955
Walter U. Kennedy, New Castle	1954	1956
Elton R. Clarke, Kokomo	1955	1957
M. C. Topping, Terre Haute	1956	1958
Kenneth L. Olson, South Bend	1957	1959
Earl W. Mericle, Indianapolis	1958	1960
Guy A. Owsley, Hartford City	1959	1961
Harry R. Stimson, Gary	1960	1962

* Deceased.

in treating topical infections, no need to sensitize the patient



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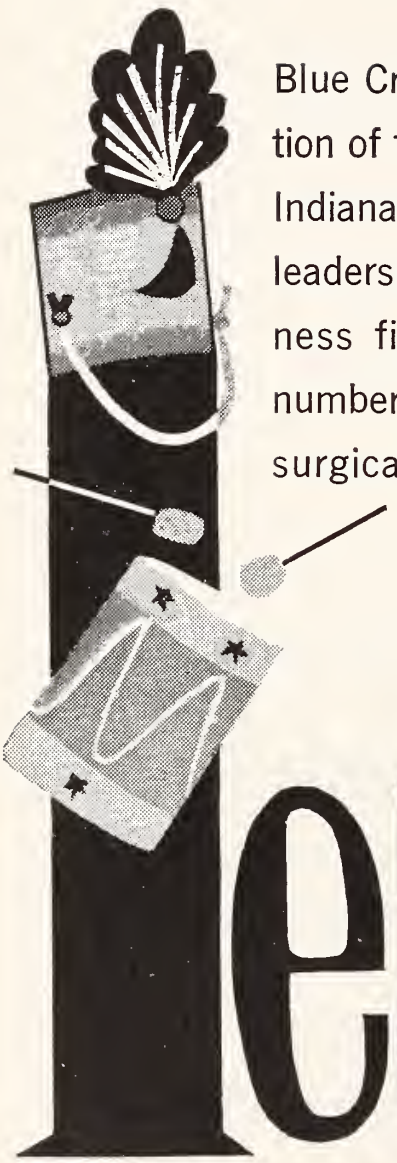
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Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **Supplied:** in ½ oz. and 1 oz. tubes.

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As a tranquilizer, TRANCOPAL (chlormezanone/Winthrop) "is effective in the symptomatic treatment of anxiety."[1] Its tranquilizing properties are similar to those of other mild tranquilizers.[1] Furthermore, it relieves tension of both mind and muscle without interfering with normal activity or alertness.

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Unsurpassed Tolerance: Less than 3 per cent of patients develop side effects with TRANCOPAL (chlormezanone/Winthrop), such as occasional drowsiness, dizziness, flushing, nausea, depression, weakness and drug rash. If severe, medication should be discontinued. In most patients, however, side effects are minor and do not necessitate interruption of treatment. There are no known contraindications.

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Dosage: Adults, 1 Caplet (200 mg.) three or four times daily; in some patients 100 mg. three or four times daily suffices. Children (5 to 12 years), from 50 to 100 mg. three or four times daily.

Winthrop
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New York 18, N.Y.

References: 1. A.M.A. Council on Drugs: J.A.M.A. 183:469 (Feb. 9) 1963. 2. Gruenberg, F.: Curr. Ther. Res. 2:1 (Jan.) 1960.

1783M

INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—April, 1963

Disease	Apr. 1963	Mar. 1963	Feb. 1963	Apr. 1962	Apr. 1961
Animal Bites	890	421	293	785	527
Chickenpox	658	786	1054	468	613
Conjunctivitis	87	94	86	97	105
Diphtheria	0	2	1	2	1
Dysentery, Unspecified	60	95	219	34	25
Impetigo	64	74	96	81	79
Infectious Hepatitis	52	62	163	212	285
Infectious Mononucleosis	23	41	44	32	29
Influenza	959	16934	12591	750	437
Measles (Rubeola-Rubella)	1176	847	686	1723	1022
Meningitis, Meningococcal	3	3	3	5	5
Meningitis, Other	9	10	5	6	9
Mumps	370	381	408	450	1001
Pertussis	13	37	63	26	3
Pneumonia	197	501	316	124	173
Poliomyelitis	0	0	0	0	1
Streptococcal Infections	582	325	993	530	691
Tinea Capitis	2	6	10	8	22
Tuberculosis (Active)	161	106	85	78	Not Available

ROSTER AND YEARBOOK ISSUES

The Roster and Yearbook issues of the Indiana State Medical Association will appear in June. Included in the Roster will be the names of all members of the ISMA listed alphabetically and by counties, plus the names of all the Woman's Auxiliary.

The Yearbook, besides carrying the Roster, includes listings of the following: State Health Organizations; Professional Medical and Allied Organizations; Voluntary Organizations; Heads of Departments at the I. U. School of Medicine; Indiana Accredited Practical Nursing Schools; Approved Hospitals in Indiana; Approved Mental Hospitals; Licensed Nursing Homes; Poison Control Centers in Indiana; Disease Prevention by Immunization and Chemoprophylaxis and Class A Narcotic Drugs.

If you would like to order either or both of these special issues, please check the appropriate box and send it along with your check or money order to *The Journal*, 3935 N. Meridian St., Indianapolis 8.

☐ Roster — $3.00

☐ Yearbook — $5.00

Name_____

Address_____

City_____

State_____

Constitution and Bylaws of the Indiana State Medical Association

CONSTITUTION

ARTICLE I.—NAME OF THE ASSOCIATION

The name and title of this organization shall be the Indiana State Medical Association.

ARTICLE II.—PURPOSE OF THE ASSOCIATION

The purposes of this Association shall be to federate and bring into one compact organization the medical profession of the State of Indiana, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education and to secure the enactment and enforcement of just medical laws; to promote friendly intercourse among physicians; to protect its members against imposition; and to enlighten and direct public opinion in regard to the great problems of medical care, and public health, so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

ARTICLE III.—COMPONENT SOCIETIES

Component societies shall consist of those county medical societies which hold charters from this Association.

ARTICLE IV.—COMPOSITION OF THE ASSOCIATION

Section 1.—This Association shall consist of Active Members, Associate Members, Senior Members and Honorary Members.

Sec. 2.—*Active Members.*—The active members of this Association shall be the members of the component county medical societies, and no county medical society shall grant active membership therein on a basis that does not include membership in the Indiana State Medical Association.

Sec. 3.—*Associate Members.*—Members of the Indiana State Dental Association in good standing are, by virtue of their membership therein, made associate members of the Indiana State Medical Association.

Sec. 4.—*Senior Members.*—Senior members shall be physicians of the State of Indiana who have attained the age of seventy years and have held membership in the Indiana State Medical Association for twenty years or more, and who, upon their application, have been certified to the executive secretary as eligible for such membership by the county societies of which they are members. Eligibility to senior status shall begin the year after the member reaches the age of seventy.

All members who, previous to the adoption of this amendment to the constitution, were certified as honorary members on the basis of the above qualifications, shall hereafter be classified as senior members.

Sec. 5.—*Honorary Members.*—Honorary members shall consist of teachers, scientists and others who have rendered highly meritorious service to the profession of medicine, and of physicians and surgeons of distinction, upon whom the Association may, through vote of the House of Delegates, desire to confer such membership as a special honor.

Sec. 6.—*Rights and Privileges of Members.*—Active members and senior members shall have the same rights and privileges except as follows:

a. Senior members shall not be required to pay membership dues in the State Association.

b. If senior members desire to receive THE JOURNAL of the State Association, they shall pay the regular subscription price therefor.

c. Honorary members hereafter elected shall hold such membership as an honor and distinction and shall have the right to attend meetings of the Association. They shall have the privilege of participating in discussions but shall have no right to vote or to hold office. They shall not be required to pay membership dues in the State Association.

ARTICLE V.—HOUSE OF DELEGATES

The House of Delegates shall be the legislative and business body of the Association and shall consist of (1) Delegates elected by the component county societies; (2) the Councilors; and (3) the ex-presidents of the Indiana State Medical Association. The following shall be *ex officio* members: the President, the President-elect, the Executive Secretary, the Treasurer of this Association, and the delegates to the American Medical Association, all without power to vote, except in case of a tie vote, when the President or person presiding shall cast the deciding vote.

ARTICLE VI.—COUNCIL

The Council shall consist of (1) the Councilors, and (2) *ex officio* the President, President-elect, and Treasurer with power to vote. Besides its duties mentioned in the Bylaws, it shall constitute the Board of Trustees of this organization, having full charge and control of all the property

of the Association. It shall have full authority and power of the House of Delegates between sessions of the House of Delegates, except that it shall not make changes in the laws governing the Association nor exercise legislative functions, except as stated in the Bylaws, and at all times shall be the finance committee of the Association. Seven Councilors shall constitute a quorum.

ARTICLE VII.—SECTIONS AND DISTRICT SOCIETIES

The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections; and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies. Councilor districts shall be defined by the House of Delegates.

ARTICLE VIII.—CONVENTION AND MEETINGS

Section 1.—The Association shall hold an Annual Convention during which there shall be held such general and section meetings as the Association through its duly constituted officers and committees may provide for.

Sec. 2.—The House of Delegates shall select the place two years in advance for holding the annual convention. The time for the convention shall be fixed by the Council, and the Council shall have the power also to change the place for holding the convention where conditions may create difficulties in holding a successful convention at the place designated by the House of Delegates.

Sec. 3.—Special meetings of either the Association or the House of Delegates shall be called by the President on petition of twenty delegates or fifty members.

ARTICLE IX.—OFFICERS

Section 1.—The officers of this Association shall be a President, a President-elect, an Executive Secretary, a Treasurer, and thirteen Councilors, each of whom shall be a member, except the Executive Secretary, who need not necessarily be either a physician or a member.

Sec. 2.—The officers, except the Councilors and the Executive Secretary, whose election has been provided for hereinafter, shall be elected annually. The terms of elected Councilors shall be for three years and approximately one-third of the number shall be elected annually. No Councilor shall be eligible to serve longer than two consecutive three-year terms, effective with the beginning of his next election following the adoption of this amendment.

All of these officers shall serve until their successors are elected and installed. Provided, that if any elected Councilor fails, without reason acceptable to the Council, in any one calendar year to attend a majority of the meetings of the Council, he shall thereby cease to be a Councilor, and the Executive Secretary shall thereupon take action in accordance with Section 4 of this article.

Sec. 3.—The officers of this Association with the exception of the executive secretary shall be elected by the House of Delegates as the first order of business of the last day of the Annual Convention, and no person shall be elected to any such office who has not been an active member of the Association for the preceding two years.

Sec. 4.—The Councilors shall be elected by the respective district societies. If any district fails to meet and elect its Councilor by the time of expiration of the incumbent's term of office, the Executive Secretary of the Association shall cause a special meeting to be called by said district society for the purpose of such election.

Sec. 5.—Each Councilor district shall elect an alternate Councilor whose term of office shall be the same as the Councilor, namely three years. The alternate Councilor shall be elected in a year during which there is no Councilor elected.

The duties of the alternate Councilor shall be:

1. To represent the Councilor district in the absence of the regularly elected Councilor.

2. To vote only in the absence of the regularly elected Councilor either in the House of Delegates or in Council meetings where he represents the regularly elected Councilor.

3. The alternate Councilor shall not have the power of discussion if the regularly elected Councilor is present.

Sec. 6.—Any officer may be removed from office after a hearing before the Council, on thirty days' notice, on charges in writing, upon a vote of three-fourths of the members of the Council.

Sec. 7.—In event of the death, resignation, removal, or disability of the President, the President-elect shall succeed to the presidency. In the event of the death, disability, resignation or removal of both the President and the President-elect, the chairman of the Council shall become President pro tem and as such shall, within a period of sixty days, call a special session of the members of the House of Delegates for the purpose of electing members to fill these vacancies, who shall serve until the next regular meeting of the House of Delegates, at which time both a President and a President-elect shall be elected, both of whom shall take office immediately upon their election.

Sec. 8.—A vacancy in the office of Treasurer shall be filled by an election by the Councilors

at the next regular meeting of the Council following the occurrence of such vacancy.

Sec. 9.—In the event of a vacancy occurring from any cause, except expiration of the term of office, in the office of any district councilor, the duly elected alternate councilor from the same district shall succeed to the office of councilor in that district for the unexpired term of said councilor.

In the event vacancies occur in any councilor district in the offices of both councilor and alternate councilor, the vacancies shall be filled by an election by the members of the association within the councilor district in which such vacancies occur. A call for such elections shall be issued by the executive secretary of the State Association following conference with the officers of the district organization. The call shall state the time and place of holding the election and shall be sent registered mail to the county secretary as filed in the State secretary's office of each component society within the district. Such call shall be mailed within ten days after the State secretary has learned of the vacancies. The election may be held at a special or regular meeting in which other business than the election may be transacted. Such election shall be held within fifteen days after the secretary of the State Association shall have mailed such call.

Sec. 10.—None of the officers shall receive compensation except the Executive Secretary, who shall be employed by the Council, and the Council shall fill any vacancy in that office.

ARTICLE X.—RECIPROCITY OF MEMBERSHIP WITH OTHER STATE SOCIETIES

In order to broaden professional fellowship, this Association is ready to arrange with other State Medical Associations for an interchange of certificates of membership so that members moving from one state to another may avoid the formality of re-election.

ARTICLE XI.—INCOME AND EXPENSES

Funds for carrying on the activities of this Association shall be raised by the following means:

a. Membership dues to be collected by the component county societies in connection with the dues for such component societies. The amount of the dues of each component society shall be fixed by the society itself; and the amount of dues for this Association shall be fixed from time to time by the House of Delegates.

b. Voluntary contributions.

c. Revenues derived from the Association's publications.

d. Any other manner approved by the House of Delegates.

Funds may be appropriated by the House of Delegates to defray the expenses of the Association, for publications, and for such other purposes as will promote the welfare of the profession. All motions and resolutions appropriating funds must be referred to the Council for approval before final action is taken thereon.

ARTICLE XII.—REFERENDUM

Section 1.—A General Meeting of the Association may, by a two-thirds vote of the members present, order a general referendum on any question pending before the House of Delegates, and when so ordered the House of Delegates shall submit such question to the members of the Association, who may vote by mail or in person, and if the members voting shall comprise a majority of all members of the Association, a majority of such vote shall determine the question and be binding on the House of Delegates.

Sec. 2.—The House of Delegates may, by a two-thirds vote of its own members, submit any question before it to a general referendum, as provided in the preceding section, and the result shall be binding on the House of Delegates.

ARTICLE XIII.—THE SEAL

The Association shall have a common Seal, with power to break, change or renew the same at pleasure.

ARTICLE XIV.—AMENDMENTS

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates present at any Annual Convention, provided that such amendment shall have been presented in open meeting at the previous Annual Convention, and that it shall have been published twice during the year in THE JOURNAL of this Association.

BYLAWS

CHAPTER I.—MEMBERSHIP

Section 1.—The term "Member" as used in these Bylaws unless otherwise indicated shall mean both active and senior members of component county medical societies who hold either the Degree of Doctor of Medicine or Bachelor of Medicine.

Sec. 2.—Any physician who is a member in good standing of a component county society and who has paid to this Association his annual dues is a member in good standing of the Indiana State Medical Association, provided, however, that he is a citizen of the United States of America, or has filed his declaration of intention of becoming a citizen and his first citizenship papers are in full force and effect.

Sec. 3.—No person whose license to practice medicine has been suspended or revoked or who is under sentence of suspension or expulsion from a component society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this association or of a component county society, nor shall he be permitted to take part in any of their proceedings until he has been relieved of such disability.

Sec. 4.—Each member in attendance at the Annual Convention shall register by indicating the component society of which he is a member. When his right to membership has been verified, by reference to the roster of his society, he shall receive a badge, which shall be evidence of his right to all the privileges of membership at that convention. No member shall take part in any of the proceedings of an Annual Convention until he has complied with the provisions of this section.

CHAPTER II.—GENERAL MEETINGS

Section 1.—General Meetings shall mean all meetings planned for attendance by all registered members, and shall include those meetings in which guests of registered members or the general public are also invited. The address of the President may be delivered in a General Meeting, and the programs of General Meetings shall be arranged by the Executive Committee except where scientific papers are included, in which event the scientific part of the program shall be arranged by the Commission on Convention Arrangements, with the sanction and approval of the officers.

Sec. 2.—The General or Section Meetings may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

Sec. 3.—All scientific papers read before the Association or any of the sections shall become its property and shall not be published in any but the official publications of this Association, except by consent of the officers and the Editorial Board of this Association. Each such paper shall be deposited with the Executive Secretary when read.

Sec. 4.—The Council shall appropriate from the funds of the Association for such an amount as in the discretion of the Council shall be reasonably needed for that purpose, and no commitments shall be made for expenses in excess of the amount appropriated for such Convention. The funds so appropriated shall, upon the approval of the Executive Committee, be expended at the direction of the Commission on Convention Arrangements appointed by the President for the Convention for which the appropriation is made. All money in excess of that expended for actual expenses incurred shall revert each year to the treasury of the Association.

CHAPTER III.—SECTIONS

Section 1.—During the Annual Convention the Association in addition to the general meetings may hold the following section meetings:

a. Surgical.
b. Internal Medicine.
c. Eye, Ear, Nose, and Throat.
d. Anesthesia.
e. General Practice.
f. Obstetrics and Gynecology.
g. Preventive Medicine and Public Health.
h. Radiology.
i. Nervous and Mental Diseases.
j. Any other sections that hereafter may be provided for by the House of Delegates.

Sec. 2.—The officers of each section shall be a Chairman, a Vice-Chairman, and a Secretary, and they shall preside over the meetings of the sections and shall be responsible to the Committee on Scientific Work for the section speakers and papers.

Sec. 3.—The election of officers of the sections shall be the last order of business of the last meeting of the sections during the Annual Convention.

Sec. 4.—No section meeting shall be allowed to conflict with a general meeting.

CHAPTER IV.—HOUSE OF DELEGATES

Section 1.—The House of Delegates may meet on the day before the date set for the beginning of the general registration of the attendance at the Annual Convention. It may adjourn from time to time as may be necessary to complete its business, provided that its hours shall conflict as little as possible with the General or Section Meetings. It shall meet on the last day of the Annual Convention for the election of officers for the ensuing year, and for the completion of any business previously introduced. The order of business shall be arranged as a separate section of the program.

Sec. 2.—Each component county society shall be entitled to send to the House of Delegates each year one delegate for every fifty members and one for each major fraction thereof; but, irrespective of the number of members, each component society which has made its annual report and paid its assessments, as provided in this Constitution and Bylaws, shall be entitled to one delegate, except that where a component society is made up of physicians of more than one county, each county shall be entitled to at least one delegate and one alternate delegate who shall be a resident of the county he represents as a delegate or alternate delegate and who shall be selected by the physicians residing in such county.

The number of Delegates to which each Component Society is entitled shall be based upon the

number of members on record in the office of the Executive Secretary in good standing with current dues fully paid as of December 31 of the preceding year.

The names of duly elected delegates and alternates from each component society shall be sent to the Executive Secretary of this Association on or before February first prior to the Annual Convention at which such delegates are to serve. No one shall be entitled to a seat in the House of Delegates unless his credentials as a delegate or alternate, properly signed by the secretary of his county society, be presented to the Committee on Credentials at the time of the Annual Convention.

Sec. 3.—Fifty delegates shall constitute a quorum.

Sec. 4.—The House of Delegates shall:

a. Elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

b. Divide the State into Councilor Districts, specifying what counties each district shall include, and when the best interests of the Association and profession will be promoted thereby, organize in each district a medical society, and all members of component county societies, and no others, shall be members of such district societies.

c. Have authority to appoint committees for special purposes from among members of the Association who need not be members of the House of Delegates. Such committees shall report to the House of Delegates, and the members of such committees may be present and participate in the debate on their reports.

d. Approve all memorials and resolutions issued in the name of the Association before the same shall become effective.

Sec. 5.—Proposals calling for appropriations of funds by the House of Delegates shall be submitted to the Council for its recommendation before final action of the House.

Sec. 6.—At the first meeting the President shall announce the membership of the reference committees, as hereinafter provided for, and any other committees considered by him necessary to expedite the business of the Association.

Sec. 7.—All resolutions to be presented to the House of Delegates for action shall be prepared and mailed to the Executive Secretary of the Association so that he will receive them not later than forty-five days prior to the meeting of the House of Delegates to which the resolutions will be presented for action.

Provided, that this sub-section of the Bylaws may be suspended with respect to any resolution upon a two-thirds majority vote of the House of Delegates.

Sec. 8.—The final vote on any issue calling for changes in dues or in dues structure or any changes in the Constitution and Bylaws shall be by roll call vote. Each member's vote shall be permanently recorded and no suspension of this rule will be allowed on the final vote of such an issue.

CHAPTER V.—ELECTION OF OFFICERS

Section 1.—The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the last day of the Annual Convention.

Sec. 2.—All elections shall be by ballot, and a majority of the votes cast shall be necessary to elect. In case no nominee receives a majority on the first ballot, the nominee receiving the lowest number of votes shall be dropped and a new ballot taken.

Sec. 3.—Any person known to have solicited votes for or sought any office within the gift of this Association shall be ineligible for any office for two years.

Sec. 4.—The President, President-elect, and the Treasurer shall serve from the termination of the annual meeting of the House of Delegates in which the President-elect and Treasurer are elected until the termination of the succeeding annual meeting of the House of Delegates.

CHAPTER VI.—DUTIES OF OFFICERS

Section 1.—The president, or a member designated by him, shall preside at all general meetings of the Association and of the House of Delegates. The President shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged by the Executive Committee, and shall perform such other duties as custom and parliamentary usage may require. He shall be the real head of the profession of the state during his term of office, and as far as practicable, shall visit by appointment the various sections of the state and assist the Councilors in building up the county societies and in making their work more practical and useful.

Sec. 2.—The President-elect's term of office shall be for one year, at the completion of which he succeeds to the presidency. While President-elect, he shall assist the President in the discharge of his duties.

Sec. 3.—The Treasurer shall give bond at the expense of the Association in such an amount as shall be required by the Council. He shall receive all bequests and donations to the Association and shall demand and receive all funds due the Association except accounts due THE JOURNAL in the conduct of its business. The funds of the

Association shall be deposited in a depository or depositories designated by the Executive Committee, and withdrawals from such funds shall be made on checks or drafts signed by the Treasurer and the Chairman of the Council. He shall present to the House of Delegates annually a report of the receipts and expenditures, and the state of the funds in his hands, and shall subject his accounts to an annual audit by a Certified Public Accountant.

Sec. 4.—The Executive Secretary shall be the directing manager of the Association's headquarters and JOURNAL offices, and shall supervise the work of all salaried employees in the Association offices. Such supervision shall be subject to directives from the House of Delegates, the Council, the Executive Committee, and the President of the Association. He shall discharge the administrative functions of the Association not within the duties of other officers or of committees to perform. He shall assist, at their request, all officers and committees, and shall keep himself informed in regard to non-professional matters affecting the medical profession, for the purpose of keeping himself qualified to perform the services herein mentioned. He shall be responsible for the execution and carrying out of the policies of the Association and in that connection shall perform all specific tasks committed to him by the committees, the Council, and the officers of this Association. The amount of his salary shall be fixed by the Executive Committee on approval of the Council.

Sec. 5.—The necessary expenses of the above officers incurred in the line of duty herein imposed may be allowed by the Council, but excepting the Executive Secretary, this shall not include the expenses of attending the Annual Convention.

CHAPTER VII.—COUNCIL

Section 1.—The Council shall meet as follows: 1. January, April, and July of each year on dates and at places fixed by the Council. 2. On the day preceding the first day for the scientific meetings of the Annual Convention of the Association. 3. On the last day of the Annual Convention of the Association after the adjournment of the House of Delegates. 4. At such other times as necessity may require, subject to the call of the Chairman, or on petition of three Councilors. It shall hold no meeting that will conflict with any meeting of the House of Delegates. It shall elect a Chairman, and a Clerk, who, in the absence of the Executive Secretary of the Association, shall keep a record of its proceedings. It shall, through its Chairman, make an annual report to the House of Delegates. It shall organize itself at the meeting following the final session of the House of Delegates by electing its chairman who shall serve for one year. The chairman of the Council shall be elected by secret ballot. The number of terms of the chairman shall be limited to not more than three in succession.

Terms of councilors shall begin with the first meeting of the Council following the final session of the House of Delegates at the Annual Session.

Sec. 2.—Each Councilor shall be organizer, peacemaker, and censor for his district. He shall visit the counties in his district at least once a year for the purpose of organizing component societies where none exist; for inquiring into the condition of the profession, and for improving and increasing the zeal of the county societies and their members. He shall make an annual report of his work and of the condition of the profession of each county in his district, the same to be published in the number of THE JOURNAL which is issued immediately preceding the Annual Convention. The House of Delegates may take such action, if any, as it deems appropriate upon such reports. The necessary expenses incurred by such Councilor in the line of the duties herein imposed may be allowed by the Council on a properly itemized statement, but this shall not be construed to include his expense in attending the Annual Convention of the Association.

Sec. 3.—The Council shall, through its officers and otherwise, give diligent attention to and foster the scientific work and spirit of the Association, and shall study and strive constantly to make each Annual Convention a stepping stone to future ones of higher interest.

Sec. 4.—The Council shall, in connection with the House of Delegates, consider and advise as to the interests of the profession and of the public in those important matters wherein it is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation and to diffuse popular information in relation thereto.

Sec. 5.—The Council shall make careful inquiry into the condition of the profession of each county in the state and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality and shall continue these efforts until every physician in every county of the state who can be made reputable has been brought under medical society influence.

Sec. 6.—The Council shall encourage postgraduate and research work, as well as home study, and shall endeavor to have the results utilized and intelligently discussed in the county societies.

Sec. 7.—The Council shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and Bylaws.

Sec. 8.—In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies to be designated by hyphenating the names of two or more counties so as to distinguish them from district and other classes of societies; and these societies, when organized and chartered, shall be entitled to all the privileges and representation provided herein for county societies, until such counties may be organized separately.

Sec. 9.—The Council shall be the Board of Censors of the Association. It shall consider all questions involving the rights and standings of members whether in relation to other members, to the component societies, or to this Association. All questions of an ethical nature brought before the House of Delegates or the General or Section Meetings shall be referred to the Council without discussion. It shall hear and decide all questions of discipline affecting the conduct of members of component societies on which an appeal is taken from the decision of an individual Councilor, and its decision in all such matters shall be final.

Sec. 10.—The Council shall provide for and superintend all publications of the Association, and shall have authority to appoint an editor and such assistants as it deems necessary, and fix the amounts of their salaries. The proceedings of the Council for the year shall be reported to the House of Delegates at the Annual Convention and be published in the number of THE JOURNAL which immediately precedes the Annual Convention.

Sec. 11.—In the interim between the meetings of this Association the Council shall be the executive body of the Association with full power to fill vacancies or transact any business that emergencies or the welfare of the Association may require.

Sec. 12.—The Council shall at its meeting following the close of the House of Delegates elect two members of the Association, at large, or of the Council, who, with the President, the President-elect, the Treasurer, and the Chairman of the Council, shall constitute and be known as the Executive Committee. If such members of the Executive Committee be not members of the Council they shall not have the power of vote in the Council.

CHAPTER VIII.—ORGANIZATION OF ACTIVITIES AND RESPONSIBILITIES

Section 1.—The work of the Association, the performance of which is not provided for elsewhere in the Constitution or Bylaws, and is not carried on in the meetings of the Council or of the House of Delegates, or by Special Committees created by the Executive Committee, the Council, or the House of Delegates, shall be performed by the following standing committees and commissions:

The Executive Committee
The Grievance Committee
The Student Loan Committee
The Medical-Legal Review Committee
The Commission on Convention Arrangements
The Commission on Constitution and Bylaws
The Commission on Legislation
The Commission on Public Information
The Commission on Governmental Medical Services
The Commission on Public Health
The Commission on Voluntary Health Agencies
The Commission on Medical Economics and Insurance
The Commission on Inter-Professional Relations
The Commission on Medical Education and Licensure
The Commission on Special Activities
The Commission on the Aged and Aging

The difference between committees and commissions is shown in the provision of these Bylaws pertaining to their work and composition.

Sec. 2.—Unless otherwise provided in these Bylaws, the committees shall be appointed by the President with the chairman of each committee designated by him, and the number constituting each committee shall be as indicated in the section of these Bylaws pertaining to each particular committee.

Sec. 3.—Each commission will consist of fifteen members appointed by the President, with at least one member from each councilor district. The original appointees in each commission shall be divided into three groups by lot. The first group shall serve three years; the second, two years; and the third, one year. Thereafter, each incoming President shall appoint five members of each commission to fill the vacancies resulting from the expiration of the terms of members, and such appointments shall be for three years. The President shall also appoint members to fill the unexpired term where any vacancy occurs through death, resignation or otherwise.

Sec. 4.—The President shall have the power, with the approval of the Council, to remove any member of any committee or commission where such member, for any reason, does not or cannot work at attempting to perform the duties pertaining to membership on such committee or commission.

Sec. 5.—Unless otherwise provided in these Bylaws, no member of either a committee or a commission shall serve on the same committee or commission more than two consecutive terms, but this shall not prevent him serving more than two terms if the term of another member intervenes. The time given to the serving of an unexpired term shall not be considered in determining the period within which a member may serve consecutively.

Sec. 6.—Within sixty days after the meeting of the State Convention, the President will call all commissions and committees into a joint meeting in which he will give a statement of the duties and responsibilities of all committees and commissions, call special attention to any immediate problems confronting the Association, and assign such problems or parts thereof to appropriate committees and commissions. Then this joint meeting will divide into meetings of the separate commissions, at which time the commissions and committees will organize by the election of chairman, vice-chairman and secretary, unless otherwise provided for in these Bylaws. In these meetings the commissions may provide for such subcommittees within the separate commissions as they may deem advisable. Each committee or commission shall have the right to call upon other committees, commissions or members of the profession for counsel and advice with respect to its work.

Sec. 7.—Each committee and commission shall have the privilege and is encouraged to have joint meetings with any like committee or commission of the Auxiliary where such like committee or commission exists, for the purpose of coordinating their activities to make them more effective in the medical service of the public and the intent of the Association.

Sec. 8.—Each committee and commission shall have the duty and responsibility of keeping constantly and currently informed on the matters within the area of its special interest and activity; of studying the conditions within that area with the purpose of finding possibilities of improvement; of finding the best solutions it can to the specific problems referred to it; of contributing in its area to the achievements of the Association as a whole in the protection and improvement of the health of the whole human family; and finally of making all its efforts useful by passing on to the Association in the most effective manner possible the results of its studies and activities in its own area of special interests.

Sec. 9.—The President and Executive Secretary shall be *ex officio* members of all the foregoing committees and commissions without voting rights where their inclusion on the committee or commission is not otherwise provided for in these Bylaws.

CHAPTER IX.—THE EXECUTIVE COMMITTEE

Section 1.—The Executive Committee, constituted as provided in Section 12 of Chapter VII of these Bylaws, shall hold its first meeting immediately following the meeting of the Council held at the close of the last meeting of the House of Delegates in the annual convention, and shall organize by electing its chairman. Its secretary shall be the Executive Secretary of the Association. It shall meet with the Executive Secretary on the call of the Chairman, or of any three members, to plan and execute such work as may be necessary for the welfare of the Association and the conduct of the Executive Secretary's office. It shall have all jurisdiction with respect to medical defense activities of the Association and shall be governed by the rules it adopts concerning that activity and by the Bylaws of this Association. It shall make decisions for the Association, including matters pertaining to THE JOURNAL, during the intervals between the meetings of the Council, and shall report its actions to the Council.

Sec. 2.—It shall prepare a budget for the ensuing fiscal year; and all expenditures of the Association, except those otherwise provided for under the Constitution and Bylaws, shall be governed by the budget. No expense not provided for in the budget or otherwise under the Constitution and Bylaws shall be incurred by any officer, commission or committee. A committee, commission or officer may submit a request for funds to meet unusual expenses not included in the annual budget, and the Executive Committee shall have the power, by a two-thirds vote, to amend the budget to provide such funds.

CHAPTER X.—THE GRIEVANCE COMMITTEE

Section 1.—The Grievance Committee shall be composed of nine physicians, three of whom may be past presidents of the Association, and all of whom shall be appointed by the President. Not more than two physicians shall be appointed from any one councilor district. No member shall hold any elective office in the State Association during tenure on this committee. Of the nine physicians first appointed, three shall serve for a period of one year; three for two years; and three for three years. Thereafter, three shall be appointed each year for a three-year term to fill the vacancies caused by the expiration of terms. Any vacancy occurring in this committee, other than by expiration of term, shall be filled by an interim appointee to serve the balance of the unexpired term. This committee shall organize itself by electing a chairman, a vice-chairman and a secretary.

Sec. 2.—This provision regarding the constitution of the Grievance Committee shall be construed to mean that the present committee of that name is continued in that position with the terms of its members expiring and new members to be appointed on the basis of this provision being operative and effective as of the dates of their respective original appointments; and it is not to be construed as having the effect of creating a new committee, all of whose members are to be appointed upon this amendment being adopted and becoming effective.

Sec. 3.—In addition to the above provided organi-

zation and membership of the committee, the President of the Association shall appoint an accredited psychiatrist as a consultant for the committee, whose tenure of office shall be on an annual basis. The appointment of the psychiatrist may be made from any councilor district of the Association, irrespective of the membership of the committee including another member or members from the same councilor district. He shall have the same rights and privileges as other members of the committee except that he shall not have the right to vote.

Sec. 4.—The duties of this committee shall be to receive complaints, appeals or suggestions from physicians or laymen concerning professional conduct. It shall attempt to find the facts regarding any matter brought to its attention, through procedures proper and appropriate to that end, and shall attempt to adjust differences between patients and physicians, and between physicians. It may, if it believes the facts justify such action, cite a member of the Association to the Council of the State Association. It shall, subject to the approval of the Council, draw up a set of rules and regulations governing its procedure and official actions.

CHAPTER XI.—THE COMMISSION ON CONVENTION ARRANGEMENTS

Section 1.—The Commission on Convention Arrangements, with the advice and assistance of the Executive Secretary, shall provide suitable accommodations for meetings of the Association, including the House of Delegates, Council, and of their respective committees, the scientific and technical exhibits, and in conjunction with the Executive Secretary, shall have general charge of all the arrangements. Its chairman shall report an outline of the arrangements to the Executive Secretary of the Association for publication in THE JOURNAL and in the official programs, and shall make additional announcements during the session as occasion may require. The arrangements and the character of any and all technical exhibits must meet with the approval of the Executive Committee of the Association.

Sec. 2.—It shall, with the approval of the Executive Committee, prepare a program for scientific work for the annual convention in which shall be included the respective programs for section meetings which shall be prepared through cooperation with the officers of the various sections; and it shall, with the approval of the Executive Committee, arrange for scientific exhibits as a part of the annual convention.

Sec. 3.—The general, scientific and sectional programs, and the financial arrangements to provide for them must be approved by the Executive Committee before being officially announced.

CHAPTER XII.—THE STUDENT LOAN COMMITTEE

Section 1.—The Student Loan Committee shall be constituted as follows:

(a) The President of Indiana State Medical Association

(b) One Councilor of the Association to be appointed by the President

(c) One general practitioner to be appointed by the President

(d) One specialist to be appointed by the President

(e) The Treasurer of Indiana State Medical Association

(f) The Dean of Indiana University School of Medicine

(g) One of the attorneys of Indiana State Medical Association to be appointed by the President

Sec. 2.—This committee shall have authority to make loans to medical students in accordance with the terms and conditions under which funds are made available for that purpose. The committee shall organize itself at its first meeting following the annual convention of the Association, by the election of a chairman and a secretary. The committee shall adopt its own rules and regulations, subject to the approval of the Council. The secretary shall have the duty and responsibility of keeping minutes of all transactions of the committee, and shall file a copy of such minutes, as well as a copy of all papers pertaining to any application or loans, in the Headquarters Office of the Association.

CHAPTER XIII.—THE MEDICAL-LEGAL REVIEW COMMITTEE

Section 1.—The Medical-Legal Review Committee shall consist of three members whose duty it shall be to meet in joint session and work with a similar committee to be appointed by the President of the State Bar Association. This committee of the Medical Association shall function as the medical representatives provided for in the Joint Inter-Professional Code of the State Medical Association and the State Bar Association to carry out the purposes of that Code. Its duties shall be as stated in that Code in the form in effect from time to time as approved by the Association.

CHAPTER XIV.—THE COMMISSION ON CONSTITUTION AND BYLAWS

Section 1.—The Commission on Constitution and Bylaws shall keep in contact with the developments and changes in procedures in carrying on the work of this Association; shall suggest revisions necessary to keep the Constitution and Bylaws always in accord with the practices and procedures best adapted to the functioning of the Association; and shall keep the practices and procedures of the

Association consistent with the provisions from time to time contained in the Constitution and Bylaws—to the end that all members of the profession, by reference to the Constitution and Bylaws, may be able to obtain accurate information regarding procedure and practice within the Association, and that hampering of such procedure and practice by obsolete provisions in the Constitution and Bylaws may be avoided.

CHAPTER XV.—THE COMMISSION ON LEGISLATION

Section 1.—The Commission on Legislation shall study all legislation, both state and national, and all local legislative trends and movements, as to their effect upon the practice of medicine and the protection of the public health; shall keep the profession informed at all times concerning the matters within its area of responsibility; shall conduct investigations of legislative proposals; and shall maintain liaison with members of the State Legislature and of the United States Congress, and with the legislative activities of the American Medical Association. It shall strive to implement and make effective the legislative proposals adopted by the Association.

CHAPTER XVI.—THE COMMISSION ON PUBLIC INFORMATION

Section 1.—The Commission on Public Information shall collect and organize for dissemination to the public all matters of public interest within the field of medicine, including the activities of other commissions in which the public interest would be involved, and including also the achievements in the advancement of medicine which would be of interest to the public; shall disseminate all such information through the use of whatever media the Commission may find adaptable to that purpose so that such information may be brought to the public in the most effective and convincing manner; and shall develop and maintain the relations of the medical profession with the public in such a way as to give the lay public a better knowledge and understanding of the aims, objects and value of the profession to the public.

CHAPTER XVII.—THE COMMISSION ON GOVERNMENTAL MEDICAL SERVICES

Section 1. — The Commission on Governmental Medical Services shall concern itself and assume special responsibility in obtaining information and giving counsel and advice to the Association with respect to all matters in which medical service comes into contact with any existing or proposed functions of government, including civil defense, rehabilitation of persons handicapped by abnormality or disease, medical service in welfare departments, maternal and child health programs sponsored through governmental agencies, medical care of military manpower, plans and programs for medical care of veterans, medical care for dependents of those in uniformed services of the Government, plans and programs of the Government for medical care now existing or which may hereafter be adopted by any special group, government programs for elimination of venereal disease and other communicable diseases, and all programs and plans for medical care to be provided through municipal, state or federal governments.

CHAPTER XVIII.—THE COMMISSION ON PUBLIC HEALTH

Section 1.—The Commission on Public Health shall assemble and study information regarding industrial medical practice, rural health, preventive medicine, placement of physicians, traffic safety, conservation of hearing and vision; and shall bring such information, and the possibility of progress and advancement in such fields, to the attention of the medical profession, with suggestions for improvements as the commission finds such possibilities.

CHAPTER XIX.—THE COMMISSION ON VOLUNTARY HEALTH AGENCIES

Section 1.—The Commission on Voluntary Health Agencies shall maintain liaison between all voluntary health agencies and the Association; shall study and counsel in regard to planning all educational and other activities of such agencies; and shall keep the Association fully informed at all times regarding present and contemplated programs of these agencies.

CHAPTER XX.—THE COMMISSION ON MEDICAL ECONOMICS AND INSURANCE

Section 1.—The Commission on Medical Economics and Insurance shall study and improve forms used in medical and hospital insurance; shall continuously be interested in all types of plans for prepayment of medical and hospital expense, and for provision for medical and hospital service through all types of group activity; shall maintain liaison with labor with respect to labor's problems involving medical and hospital care, and Workmen's Compensation problems; and shall seek improved solutions of professional liability or malpractice problems, tax problems in relation to medical practice, and problems involving physician retirement plans.

CHAPTER XXI.—THE COMMISSION ON INTER-PROFESSIONAL RELATIONS

Section 1.—The Commission on Inter-Professional Relations shall study to find all the best methods of maintaining on the highest and most satisfactory levels physicians' professional relations with

hospitals, nurses, dentists, pharmacists, pharmaceutical manufacturers, veterinarians, nursing homes, and all other professional groups with which the practice of medicine comes into contact.

CHAPTER XXII.—THE COMMISSION ON MEDICAL EDUCATION AND LICENSURE

Section 1.—The Commission on Medical Education and Licensure shall maintain liaison with, and try to be of assistance to, medical schools and the licensing board; and shall keep in contact with, and endeavor to assist in improving, undergraduate education, postgraduate education, intern training, resident training, preceptor instruction, and public school health education.

CHAPTER XXIII.—THE COMMISSION ON SPECIAL ACTIVITIES

Section 1.—The Commission on Special Activities shall organize and promote support for the American Medical Education Fund, assistance to physicians, blood banks, and all miscellaneous activities not falling within the area of responsibilities of other commissions or committees.

CHAPTER XXIV.—THE COMMISSION ON THE AGED AND AGING

Section 1.—The duties of this Commission shall be to study, investigate, and make recommendations to the Association in the areas falling within the question of the aged and aging, including medical care programs, medical care insurance, rehabilitation, and preventive medicine.

CHAPTER XXV.—REFERENCE COMMITTEES

Section 1.—Immediately after the organization of the House of Delegates at each Annual Convention, the President shall announce the membership of the reference committees to serve during the convention for which they are appointed. Appointments to these reference committees shall be made by the President in time for them to be published in THE JOURNAL and the Handbook prior to such Annual Convention.

The President shall have the power to appoint substitutes from among the members present for absent appointees.

Each committee shall consist of five members, at least three of whom shall be members of the House of Delegates. The chairman shall be named by the President from among those who are members of the House of Delegates. To these committees shall be referred all reports, resolutions, measures and propositions presented to the House of Delegates, except such matters as properly come before the Council, and the recommendations of these committees shall be submitted to the next meeting of the House of Delegates for acceptance in the original or modified form or for rejection.

Sec. 2.—The following Reference Committees are hereby constituted to which shall be referred all matters as indicated by the titles of the committees:

(1) Sections and Section Work
(2) Rules and Order of Business
(3) Medical Education and Hospitals
(4) Legislation
(5) Public Relations
(6) Hygiene and Public Health
(7) Amendments to the Constitution and Bylaws
(8) Reports of Officers
(9) Credentials
(10) Insurance
(11) Miscellaneous Business

Where a report, resolution, measure, or proposition deals with more than one subject matter, reference thereof may, in the discretion of the President, be made (a) to as many reference Committees as are necessary to cover all subjects included therein; or (b) to only one Reference Committee which the President deems has within the scope of its reference the most important part of the matter referred.

No report of any Reference Committee shall be rejected on the ground that it covers something not included in the matters which such Committee was created to consider.

Sec. 3.—The time and place of meetings of all reference committees shall be publicly posted, and all meetings of all reference committees shall be open to all members of the Association.

Officers and chairmen of all committees whose reports are referred to reference committees shall have the right to appear and be heard before the respective committees to which such references are made, in regard to their reports.

CHAPTER XXVI.—COUNTY SOCIETIES

Section 1.—All county societies now in affiliation with this Association or those which may hereafter be organized in this state, which have adopted principles of organization not in conflict with this Constitution and Bylaws, shall, on application, receive a charter from and become a component part of this Association. The acceptance or retention of this charter shall be regarded as a pledge on the part of said component society to conduct itself in harmony with the letter and spirit of this Constitution and Bylaws and other rules and resolutions of this Association.

Sec. 2.—Charters shall be issued only upon approval of the Council and shall be signed by the President and Executive Secretary of this Association. The Council shall have authority to revoke the charter of any component society whose actions are in conflict with the letter and spirit of this Constitution and Bylaws.

Sec. 3.—Only one component medical society shall be chartered in any county. Where more than one county society exists, friendly overtures

and concessions shall be made, with the aid of the Councilor for the district if necessary, and all of the members brought into one organization. In case of failure to unite, an appeal may be made to the Council, which shall decide what action shall be taken.

Sec. 4.—Each county society shall be judge of the qualifications of its own members, but, as such societies are the only portals to this Association and to the American Medical Association, every reputable and legally registered physician who holds a degree of Doctor of Medicine or a degree of Bachelor of Medicine, and who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine, shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every physician in the county to become a member.

Sec. 5.—Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

Sec. 6.—In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

Sec. 7.—When a member in good standing in a component society moves to another county in this state, his name shall be transferred without cost to the roster of the county society into whose jurisdiction he moves, provided the transfer is approved by majority vote of the membership of said society to which the transfer is proposed.

Sec. 8.—A physician living on or near a county line may hold his membership in that county most convenient for him to attend, on permission of the society in whose jurisdiction he has his office or has the major part of his practice.

Sec. 9.—Each component society shall have general direction of the affairs of the profession in its county, and its influence shall be constantly exerted for bettering the scientific, moral and professional status of every physician in the county; and systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified and honorable physician in the county.

Sec. 10.—At the annual business meeting for election of other officers, in advance of the Annual Convention of this Association, each county society shall elect delegates and alternates to represent it in the House of Delegates of this Association, and the secretary of the society shall send a list of such delegates and alternates to the Executive Secretary of this Association annually on or before February first.

Sec. 11.—The secretary of each component society shall keep a roster of all its members and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this state, and such other information as may be deemed necessary. In keeping such roster the secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

The secretary of each component society shall prepare and send to the Councilor of his district a quarterly report briefly stating the activities of his county society including meetings, programs, changes in officers and personnel of membership. A copy of this quarterly report to the Councilor shall also be sent to the Executive Secretary of the State Association. The State Association shall supply each county secretary a form for these reports.

Sec. 12.—The fiscal year of the Association shall be from October 1 to September 30 of the succeeding year. The dues shall be collected by the calendar year and payable in advance.

The secretary of each component society shall forward the dues for his society, together with the roster of officers and members and list of non-affiliated physicians of the county, to the Executive Secretary of this Association, on or before January 1 of each year and he shall promptly report thereafter the names of any new members elected to membership in his society, and promptly forward to the Executive Secretary of this Association the dues for such new members.

The dues shall be the same for all members and entitle the members to all benefits, including the publications of this Association, from the time of paying the dues to the close of the year only. Provided, however, that physicians elected to their first membership in this Association during the first nine months of any year shall pay the regular annual dues for that year; and those elected to their first membership after October 1 of any one year shall pay fifty percent of the annual dues as dues for the remainder of that year. Interns and residents shall pay $10.00 a year annual dues during their term of service in the hospital.

In the event the county society remits a member's dues on account of financial hardship, the secretary of the county medical society shall recommend in writing to the councilor of his district the remission of the state association dues of said member of the society, showing why such recommendation should be granted. The councilor in turn shall present the recommendation to the Council, which shall have the power to remit such dues.

Sec. 13.—Any county society which fails to pay its dues or make the report required by February 1 of each year shall be held suspended, and none of its members or delegates shall be permitted to receive any of the publications of the Association or participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Sec. 14.—Each county society shall be held responsible for the faithfulness in the performance of duty on the part of its secretary in making reports and remitting dues to the Association.

Sec. 15.—Each component society shall have its own Constitution and Bylaws, which shall not be in conflict with the Constitution or Bylaws either of this Association or of the American Medical Association. An up-to-date copy thereof shall be filed with the Executive Secretary of the Indiana State Medical Association not later than May 1 of each calendar year, or where such copy is so on file and no change has been made, then it shall be sufficient to file a certificate to that effect with said Executive Secretary.

CHAPTER XXVII.—COUNCILOR DISTRICT MEDICAL SOCIETIES

Section 1.—A Councilor District Medical Society, hereinafter called the District Society, shall be a society whose members consist of the members of the County Medical Societies in the Counties which constitute the Councilor District, provided such members of County Medical Societies have paid their membership dues in the District Society.

Sec. 2.—The State shall be divided into thirteen (13) Councilor Districts with the boundary lines and numbers of each District to be as follows:

First District — Posey, Vanderburgh, Warrick, Spencer, Perry, Pike and Gibson Counties.

Second District—Knox, Daviess, Martin, Monroe, Owen, Greene and Sullivan Counties.

Third District — Dubois, Crawford, Harrison, Floyd, Clark, Scott, Washington, Orange and Lawrence Counties.

Fourth District—Jackson, Jennings, Jefferson, Switzerland, Ohio, Dearborn, Ripley, Decatur, Bartholomew and Brown Counties.

Fifth District—Clay, Vigo, Vermillion, Parke and Putnam Counties.

Sixth District—Shelby, Rush, Fayette, Franklin, Union, Wayne, Henry and Hancock Counties.

Seventh District—Morgan, Johnson, Marion and Hendricks Counties.

Eighth District—Madison, Delaware, Randolph, Jay and Blackford Counties.

Ninth District — Fountain, Montgomery, Boone, Hamilton, Tipton, Clinton, Tippecanoe, Warren, Benton and White Counties.

Tenth District — Newton, Jasper, Porter and Lake Counties.

Eleventh District — Carroll, Howard, Grant, Huntington, Wabash, Miami and Cass Counties.

Twelfth District—Wells, Adams, Whitley, Allen, Noble, DeKalb, LaGrange and Steuben Counties.

Thirteenth District—Pulaski, Fulton, Kosciusko, Marshall, Starke, LaPorte, St. Joseph and Elkhart Counties.

Sec. 3.—Each District Society shall adopt a Constitution and Bylaws, which shall not conflict with the Constitution and Bylaws of the State Association, and only one District Society shall exist within any one Councilor District. The authorized District Society in each Councilor District shall receive a charter from the State Association, and the Secretary of the District Society shall have custody of the charter.

Sec. 4.—Each District Society shall organize by electing a President, a Secretary, and a Treasurer and a Councilor and Alternate Councilor as the current Councilor term and Alternate Councilor term for the district expires, and such others as may be provided for in its Constitution and Bylaws. The office of Secretary and Treasurer may be held by the same physician. The Councilor shall continue to have the same duties and terms as are set forth in the Constitution and Bylaws of this Association.

Sec. 5.—The dues of the District Society, in an amount fixed by the District Society to meet the District Society needs, shall be collected by the Secretaries of the component County Societies and delivered to the Treasurer of the District Society. The Secretary of each District Society shall report to the office of the State Association the names and addresses of the members of his District Society, together with a copy of the minutes of each meeting of the District Society.

Sec. 6.—Each District Society shall meet at least once each year at a time and place to be fixed by the District Society. On or before January 1st of each year each District Society shall notify the headquarters of the State Association of the time and place of the annual District meeting for that year; but if no such notification has been received in the headquarters on or before the January meeting of the Council, the Councilor shall fix the time and place of the District meeting, and notice of such meeting shall be sent to the members of the County Medical Societies in such District.

Sec. 7.—Whenever a District Society is to elect a Councilor and/or Alternate, the headquarters office of the State Association shall so notify the individual members of such District Society not later than the first of March of the year in which the election is to occur.

Sec. 8.—The District Society shall send to the headquarters office of the State Association a copy of its program showing the time and place of its meetings, early enough that the headquarters office

may notify all members within the District of the meeting at least thirty (30) days prior to the date thereof.

CHAPTER XXVIII.—MISCELLANEOUS

Section 1.—The deliberations of this Association shall be governed by parliamentary usage as contained in Robert's Rules of Order, when not in conflict with this Constitution and Bylaws.

Sec. 2.—The Principles of Medical Ethics of the American Medical Association shall govern the conduct of members in their relations to each other and to the public.

CHAPTER XXIX.—MEDICAL DEFENSE

Section 1.—One dollar and twenty-five cents out of the annual dues of each member of the Association shall be set aside as a special fund for medical defense.

Sec. 2.—The administration of medical defense of this Association shall be intrusted to the Executive Committee, which shall constitute the Medical Defense Committee of the Association.

Sec. 3.—This Committee shall have full authority governing all matters pertaining to this Chapter. In order to secure to any physician sued or against whom claim is made a fair and full presentation of his defense, the Committee shall have power to enter into an agreement with such physician to furnish to him funds with which to employ and pay one attorney of his choice and such other expenses as the Committee may approve as necessary to a fair and full presentation of his defense. Provided, always, that the attorney selected by the physician must be of good reputation and standing in his profession and the terms of employment, including the fees to be paid, must be approved by the Committee in each case in advance of such agreement. Provided, further, that the Executive Committee shall set a limit to the amount which may be so expended in connection with any one claim or case.

Sec. 4.—The Treasurer of the Indiana State Medical Association shall be custodian of the defense fund, separately kept, and shall give such additional bond as may be demanded by the Medical Defense Committee. Payments out of this fund shall be made only upon approval of the Executive Committee, by checks signed by the Treasurer and the Chairman of the Council.

Sec. 5.—The Medical Defense Committee shall make an annual report to the House of Delegates of the cases in which it has been of service to members and furnish an account of the money received and expended, such report to be published in THE JOURNAL of the Indiana State Medical Association at the time and in the manner that reports of other committees of the Association are published.

Sec. 6.—This Association shall not be liable for any damage awarded, but shall be liable only for such expenses for the legal defense of its members as may be incurred in accordance with the terms of these Bylaws.

Sec. 7.—The Association shall not undertake the defense of a member in any case in which the member who applies for medical defense by the Association has failed to pay his annual dues for the year in which services were rendered which are the basis of the suit; and medical defense by the Association shall not be available in any suit based on services rendered during any period of delinquency in the payment of dues. Dues are payable on January 1, and become delinquent on February 1 of each year. The membership card of this Association, duly signed and dated by the Executive Secretary, shall be considered the only *bona fide* evidence of payment of dues or membership in this Association.

The Indiana State Medical Association shall in no case provide medical defense against any action for alleged malpractice against any physician unless such physician was a member of this Association in good standing at the time the services which are the basis of the suit were rendered.

Sec. 8.—A member desiring to avail himself of the services of the Medical Defense Committee in connection with litigation brought or threatened must send to the Executive Secretary of the Association for an application blank. After completing the data concerning the case he shall submit to a local committee of his county medical society—to be composed of the President, Secretary and one other member in good standing who may be nominated by the defendant—a full statement of the question at issue, including the diagnosis and treatment of the case and the names of physicians, nurses and other persons having knowledge of the same, who may be summoned as witnesses.

Sec. 9.—The committee of the county medical society shall immediately, after an investigation of all the circumstances and facts, transmit its report, with recommendations, to the Medical Defense Committee of this Association.

Sec. 10.—In the event that the county committee shall fail to recommend the case as one worthy of the recognition of this Association, a direct appeal may be made to the Medical Defense Committee of this Association, whose decision shall be final.

Sec. 11.—Suits brought against the estate of a deceased member shall be defended as if that member were alive; provided that such member was in good standing in the Association at the time of his death and that services for which indemnity is asked were rendered while the deceased was a member in good standing.

Sec. 12.—Medical defense shall not be available to members living outside of the State of Indiana at the time services were rendered for which indemnity is claimed.

Sec. 13.—The Medical Defense Committee shall have power to adopt such other rules, not in conflict with the foregoing, as in their judgment may seem necessary.

Sec. 14.—Medical defense as provided for by this Association shall be available to members under the terms stated in these Bylaws only in the defense of civil action for alleged malpractice, and shall not be available if such alleged malpractice occurred when the member was under the influence of any intoxicant or narcotic while rendering the service in question.

CHAPTER XXX.—DIVISION OF FEES

This Association does not countenance or tolerate fee-splitting, division of fees, or commission paying directly or indirectly, and any member found guilty shall be expelled from membership.

CHAPTER XXXI.—INVESTMENT OF SURPLUS FUNDS

Section 1.—The investment of all surplus funds of this Association shall be under the direct control and management of the Executive Committee subject to instructions in regard thereto which may be given by the Council at its option. The Executive Committee shall have the right and is encouraged to obtain the advice and counsel of the investment departments of any bank or trust company of Indianapolis in regard to the discharge of the duties covered by this chapter of the Bylaws.

CHAPTER XXXII.—AMENDMENTS

Section 1.—These Bylaws may be amended at any Annual Convention by a majority vote of all the delegates present at that convention, after the amendment has lain on the table for one day.

Sec. 2.—Upon the adoption of this Constitution and Bylaws all previous Constitutions and Bylaws are hereby repealed.

Your Blue Shield Board of Directors

As of May 1, 1963

NAME	BRANCH OF MEDICINE	REPRESENTS
Term Expires March, 1964:		
Robert H. Denham, M.D.	Orthopedics	District 13
Harry R. Stimson, M.D.*	General Practice	District 10
Joe M. Black, M.D.	General Practice	District 4
Glen V. Ryan, M.D.* (President)	General Practice	District 7
John W. Beeler, M.D.* (Secretary)	Radiology	At Large
William E. Bayley, M.D.	Pathology	At Large
Term Expires March, 1965:		
W. H. Howard, M.D.	Ob.-Gyn.	At Large
R. R. Calvert, M.D.	E.N.T.	District 9
F. W. McDowell, M.D.*	General Surgeon	District 8
G. W. Willison, M.D. (Vice-President)	Internal Medicine	District 1
M. F. Miller, M.D.	Ob.-Gyn.	District 12
H. T. Goodman, M.D.	General Practice	District 5
Term Expires March, 1966:		
John M. Paris, M.D.	General Practice	District 3
W. U. Kennedy, M.D.	General Surgeon	District 6
John A. Bowers, M.D.*	E.N.T.	District 11
C. Philip Fox, M.D.	General Surgeon	District 2
W. L. Portteus, M.D. (Honorary Chairman)	General Practice	At Large
Bernard D. Rosenak, M.D.*	Internal Medicine	At Large
E. T. Edwards, Jr., M.D.	General Practice	At Large

LAY MEMBERS	REPRESENTING
Harold A. Rasmussen, Indianapolis	Labor
H. Prentice Browning, Indianapolis (Treasurer)	Finance
A. C. Stanley, Muncie	Industry

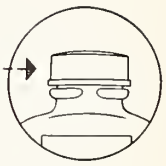
* Members of Executive Committee, Blue Shield Plan

HOW TO WIN FRIENDS...

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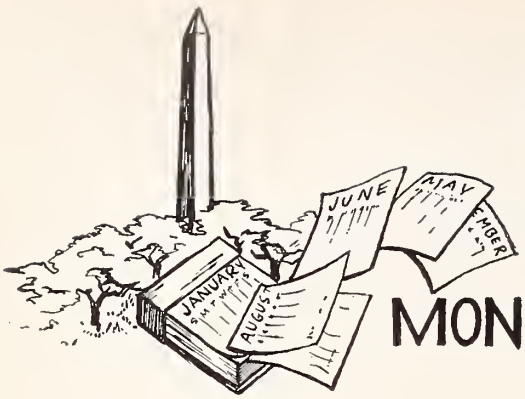
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This summary of what is happening in Washington is prepared by A.M.A.'s Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D. C.—Chairman Wilbur D. Mills (D., Ark.) of the House Ways and Means Committee has made clear that he still opposes the Kennedy Administration's legislation that would provide Social Security hospitalization for aged persons.

Mills said he did not intend to permit a Social Security bill he introduced to be used as a vehicle for Congressional action on any version of President Kennedy's disputed program.

The Mills bill would make the first $5,400 in annual earnings subject to the Social Security tax. It is $4,800 now. Kennedy's Social Security hospitalization bill would increase the tax base to $5,200.

The objective of the Mills bill is to strengthen the Social Security trust fund's financing by eliminating most of the long-range deficit now in prospect.

"My only intention in introducing the bill is to get the fund on an actuarially sound basis and to call attention to the fact that it is not actuarially sound now," Mills said.

"I assume everybody knows that I do not support the enactment of medicare under the Social Security program.

Another Democrat on the Ways and Means Committee, Rep. A. Sidney Herlong, Jr. of Florida, also expressed strong opposition recently to the Kennedy legislation, known as the King-Anderson bill, or any other plan to finance health care through Social Security.

This position by Mills and Herlong made it unlikely that the Ways and Means Committee, where such legislation normally is acted upon first in Congress, would approve any health care plan financed through Social Security.

However, supporters of the King-Anderson bill could try to attach it as a rider to another Social Security bill on the Senate floor. This was the maneuver they attempted—unsuccessfully—last year.

SENATE APPROVES MENTAL HEALTH BILL

The Senate has approved the Kennedy Administration's $848.5 million mental health bill by a vote of 72 to 1. Its sponsors were confident of House passage also.

The American Medical Association had testified in support of the

Continued



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this capsule can help one of your overweight patients do without her favorite (fattening) foods at meals—and during all the hours in between.

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Each No. 2 capsule contains 15 mg. of Dexedrine® (brand of dextro amphetamine sulfate) and 1½ gr. of amobarbital, derivative of barbituric acid [Warning, may be habit forming]. Each No. 1 capsule contains 10 mg. of Dexedrine (brand of dextro amphetamine sulfate) and 1 gr. of amobarbital [Warning, may be habit forming].

The active ingredients of the 'Spansule' capsule are so prepared that a therapeutic dose is released promptly and the remaining medication, released gradually and without interruption, sustains the effect for 10 to 12 hours.

INDICATIONS: (1) For control of appetite in overweight; (2) for mood elevation in depressive states.

USUAL DOSAGE: One 'Dexamyl' *Spansule* capsule taken in the morning.

SIDE EFFECTS: Insomnia, excitability and increased motor activity are infrequent and ordinarily mild.

CAUTIONS: Use with caution in patients hypersensitive to sympathomimetics or barbiturates and in coronary or cardiovascular disease or severe hypertension. Excessive use of the amphetamines by unstable individuals may result in a psychological dependence; in these rare instances withdrawal of medication is recommended. It is generally recognized that in pregnant patients all medications should be used cautiously, especially in the first trimester.

SUPPLIED: Bottles of 50 capsules.

Smith Kline & French Laboratories SK&F *Prescribing information Jan. 1963*

Continued

legislation when it was before the Senate Labor and Public Welfare Committee.

The bill would provide:

—A four-year program, costing $230,000,000, under which Federal grants would go to states for construction of public or other nonprofit community mental health centers. Funds would be allocated on the basis of population and need.

—An eight-year program, costing $427,000,000, of Federal grants to states for staffing of these mental health centers. Federal aid would gradually decrease and eventually would be cut off.

—A five-year program, costing $30,000,000, of Federal grants to public or other nonprofit institutions for construction of research centers and facilities for the mentally retarded.

—A five-year program, costing $42,500,000, of Federal grants for constructing college or university facilities to offer services to the mentally retarded and training for persons dealing with the retarded.

—A four-year program, costing $67,500,000, of Federal grants to states for constructing facilities for the mentally retarded. Funds would be allocated on the basis of population and need.

—A three-year program, costing $45,500,000, for training of teachers of the mentally retarded, deaf, emotionally disturbed, crippled and other handicapped children.

—A three-year program of research and demonstration projects in education of the handicapped.

VIRUSES CAUSING MUCH CANCER IN HUMANS?

The National Cancer Institute says that research strongly suggests viruses cause cancers in humans.

Reviewing medical research in the past year before a House budget subcommittee, a National Institute of Health official said:

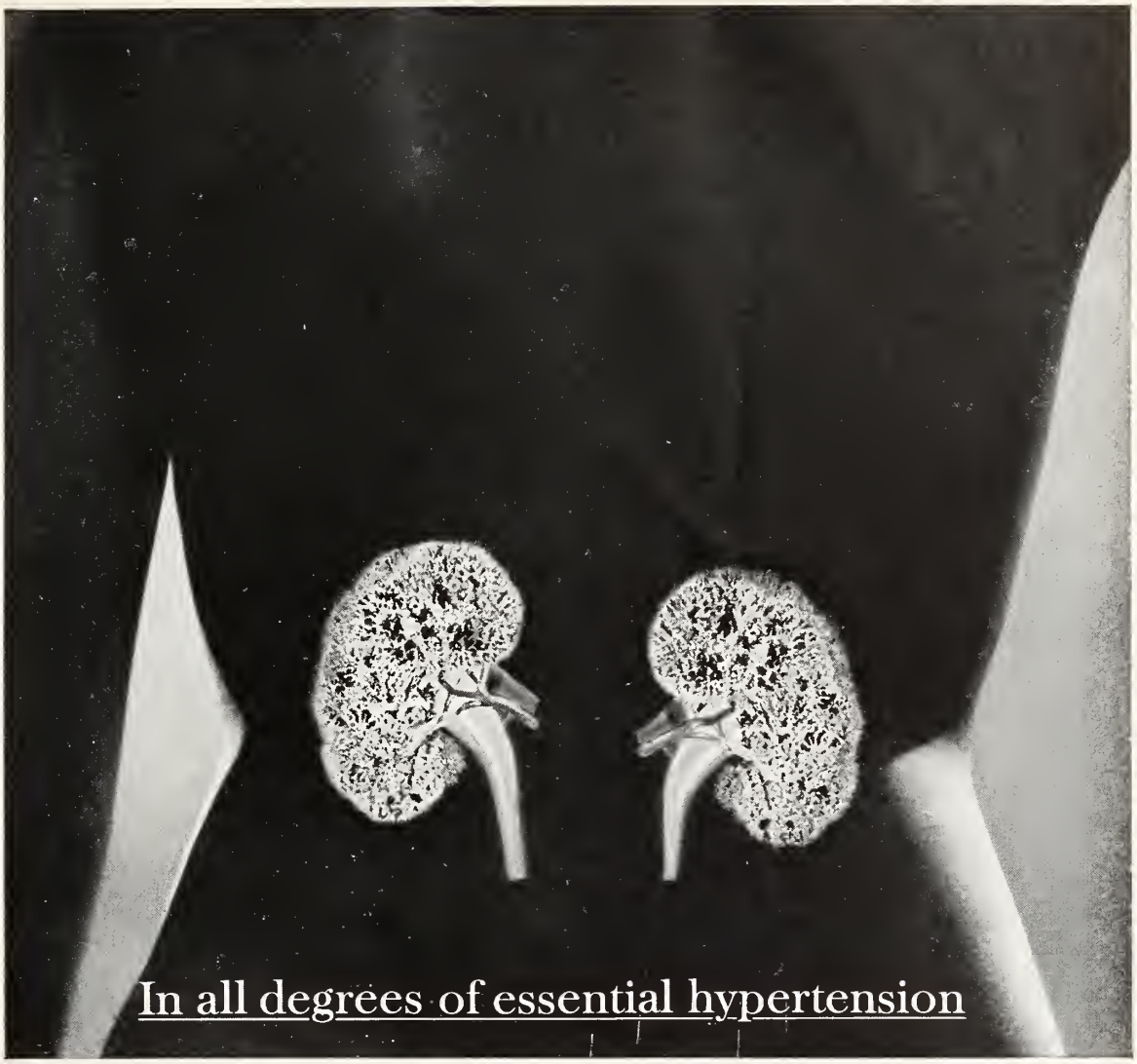
"The scientific evidence accumulated over a number of years, and particularly in the last half-dozen years, has demonstrated that viruses cause many forms of cancer in animals under experimental conditions. . . .

"The large volume of such evidence, coming from a wide variety of scientific disciplines, is so strongly suggestive of a virus-cancer relationship in man that the National Cancer Institute has given active encouragement to research in this area. To date, no human cancer-causing virus has been found. However, we know for example of a group of human viruses that have not yet been linked with specific disease, and some animal viruses that cause bizarre changes in human cells growing in tissue culture. . . .

"The present state of knowledge leaves no doubt in our minds that viruses must be studied not only as a single possible cause of cancer in man, but in the whole context of carcinogenesis. The possible interaction of substances in the total environment—such as radiation, chemicals, and viruses—in giving rise to cancer in the population must be taken into account. Already there is laboratory evidence that this can occur in animals."

Dr. Kenneth M. Endicott, Director of the National Cancer Institute, told the subcommittee that "there is no doubt left in my mind that there

Continued



Help protect the kidneys and other threatened organs

When treatment of hypertension is effective the danger of damage to the renal system is reduced.[1-2] "Hypertensive patients suffer from vascular deterioration roughly proportional to the severity of the hypertension... Reduction of blood pressure to normotensive levels reduces or arrests the progress of vascular damage with a resultant decrease in morbidity and mortality."[1] *Because Rautrax-N lowers blood pressure so effectively, it will help provide this important protection not only for the kidneys but also for the heart and brain of your hypertensive patients.* Rautrax-N is effective in mild,[3] moderate,[3,4] or severe hypertension.[4,5]

Dosage: Initially, 1 to 4 tablets daily preferably at mealtime. For maintenance, 1 or 2 tablets daily.

Side effects and precautions: Rauwolfia preparations may cause reversible extrapyramidal symptoms and emotional depression. Caution indicated in use with depression, suicidal tendencies, peptic ulcer. Minor side effects: diarrhea, weight gain, nausea, drowsiness. Bendroflumethiazide may cause reversible hyperuricemia and/or gout, unmask latent diabetes, increase glycosuria in diabetics. Caution indicated in use for patients on digitalis, with severely damaged kidneys, renal insufficiency, increasing azotemia, cirrhosis. Contraindicated in complete renal shutdown. Minor side effects: leg or abdominal cramps, pruritis, paresthesias, mild rashes.

Supply: Rautrax-N—capsule-shaped tablets providing 50 mg. Raudixin® [Rauwolfia serpentina whole root], 4 mg. Naturetin® [bendroflumethiazide], and 400 mg. potassium chloride. *Rautrax-N Modified*—50 mg. Raudixin [Rauwolfia serpentina whole root], 2 mg. Naturetin [bendroflumethiazide], and 400 mg. potassium chloride, in capsule-shaped tablets. For full information, see your Squibb Product Reference or Product Brief.

References: (1) Moyer, J. H., and Heider, C.: Am. J. Cardiol. *9*:920 (June) 1962. (2) Brest, A. N., and Moyer, J. H.: Pennsylvania M. J. *63*:545 (Apr.) 1960. (3) Berry, R. L., and Bray, H. P.: J. Am. Geriatrics Soc. *10*:516 (June) 1962. (4) Hutchison, J. C.: Current Therap. Res. *4*:610 (Dec.) 1962. (5) Feldman, L. H.: North Carolina M. J.: *23*:248 (June) 1962.

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is very strong association between excessive smoking and high incidence of cancer of the lung."

Endicott said it appeared people would persist in smoking despite medical findings and legislative action. For this reason, Endicott said, research is being conducted to eliminate any cancer-causing factors or to counter them by adding chemicals.

"I think one of the really fascinating problems, a social problem more than a medical one, is what do you do about a situation of this kind?" the physician said.

The Public Health Service Surgeon General's Committee on Smoking and Health delayed until early next year a report dealing with smoking and health evidence. The group originally was supposed to have issued its initial report by this summer but the members found they could not accomplish the research at this time. ◄

Catching the Culprit

Police still marvel at the methods of investigators in Washington, D.C., to pinpoint the source of a three-month-old infant's infection. He suffered a fungus ailment usually caused by soil contaminated by bird or fowl droppings.

When soil samples from the yard and potted plants in his home tested negatively, doctors at Children's Hospital called in a team of specialists in fungus-caused diseases. They traced three donors who had provided blood during the child's first day, but tests again proved negative. So did those on all eight family members, plus the pet dog, and on washings from the air conditioner filter and water taps.

Finally, rinse water from a feather-stuffed pillow—the family's traditional baby pillow, homemade years before in Hungary—yielded the suspected organism. The medical whodunit was solved—*Medicine at Work*, Feb., 1963. ◄



LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentation of opinions which appear on the editorial pages of the public press, and which are of interest to the medical profession. Its function is to review comments which may be favorable or unfavorable to medicine. Members are invited to submit editorial clippings for this column.

Quack, Quack

As if Congress doesn't have enough trouble keeping tabs on spending for missiles and supersonic planes, now it's being asked to appropriate money for some additional flying objects, to wit, ducks.

At a hearing on the Interior Department's appropriations bill the other day, Rep. Ben Jensen proposed inserting a little $20 million item in the measure to help insure a plentiful supply of wild ducks for his duck-hunting constituents in Iowa. The $20 million wouldn't even be spent for aid-the-duck projects in the United States; the idea is to give the money to Canada for restoration of nesting areas there so more little ducks will grow into big ducks which can wing their way over Iowa duck blinds.

Although the government would have to put up the $20 million, it could recapture some of its expenditure from the proceeds of Federal sales of duck stamps, which duck hunters have to buy before they start shooting. To be sure, revenue from duck stamps last year amounted to only about $4 million, but no matter.

In any event, Mr. Jensen is one of the leaders of the recently announced Republican drive to cut Federal spending; he and his colleagues are all for economy. Except, of course, in the case of really essential projects that only the blind would duck.—*Wall Street Journal,* April 1, 1963.

Russell Kirk Says:

Not So Many Wish To Be Doctors Now

About three years ago, a new medical school was established in Ohio, on the supposition that many promising students could not find places in existing schools of medicine. But once the new school opened its doors, qualified applicants were scarce.

There was no great backlog of candidates for medical studies, it turned out; existing institutions were accepting already the vast majority of really qualified applicants.

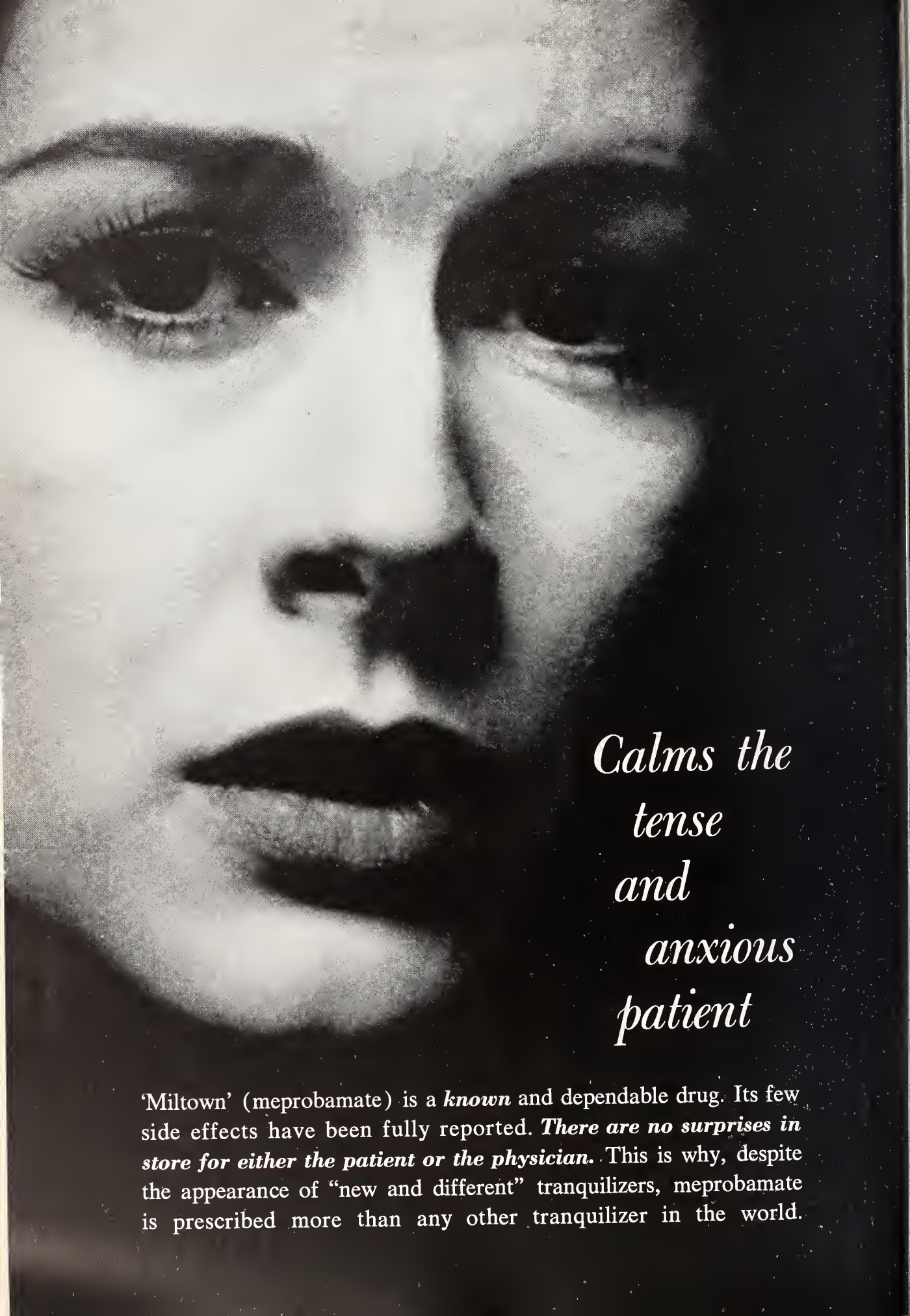
In recent years, the administrators of medical schools have found that the total number of young people desiring to become doctors of medicine is diminishing, and that the ability and performance of the average medical student is somewhat inferior to what it was a few years ago.

One reason why many promising young men do not take up medicine is that lucrative jobs in other fields are easily available today—jobs which do not require the lengthy and exacting discipline of medical studies. In the long run, indeed, the doctor's emoluments may be satisfactory; but the attractions of immediate prosperity are powerful.

Also the medical profession has been made less attractive for many possible candidates by increasing threats of governmental interference—and by the campaign of abuse of doctors carried on by certain labor unions and other advocates of state medicine. No one relishes the prospect of training for long years, merely to become another species of civil servant—and reviled in the bargain.

Similar difficulties in recruiting doctors from the rising generation are experienced in Britain today. There, under the Health Scheme (socialized medicine), at first the medical students assumed that their status and prosperity would be as good under a

Continued



'Miltown' (meprobamate) is a ***known*** and dependable drug. Its few side effects have been fully reported. ***There are no surprises in store for either the patient or the physician.*** This is why, despite the appearance of "new and different" tranquilizers, meprobamate is prescribed more than any other tranquilizer in the world.

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1. Relieves anxiety and anxious depression in a broad spectrum of clinical conditions.
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3. Relaxes both mind and skeletal muscle. Relieves physical tension as well as emotional stress.

Slight drowsiness may occur with meprobamate and, rarely, allergic reactions. Meprobamate may increase effects of excessive alcohol. Use with care in patients with suicidal tendencies. Massive overdosage may produce coma, shock, vasomotor and respiratory collapse. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction. Withdraw gradually after prolonged use at high dosage.

Usual dosage: 1 or 2 400 mg. tablets t.i.d.

Supplied: 400 mg. scored tablets, 200 mg. sugar-coated tablets; bottles of 50.

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state-governed system as under private practice. But disillusionment has come.

The American Medical Association, and other bodies, already have scholarships and recruiting-programs aplenty. Nor does there seem to be any lack of private benefaction for hospitals and medical schools. I suspect that Federal subsidies in this field would do no more than to encourage the delusion that everything can be bought with a price. Who would wish to be treated by a doctor attracted to his profession merely by a Federal largess?—*Indianapolis Star*, April 29, 1963. (Copyright General Features Corp., 1963.)

Let It Fall Behind

The Kennedy administration is assiduously cultivating the notion that the Federal government is entitled by logic and natural right, to expand in proportion to the country's growth.

The President and his subordinates are advancing the claim that growth of the Federal payroll is above criticism as long as the addition of new employees is only in proportion to the growth in population.

They defend Federal spending and the national debt on the ground that they grow no faster than the gross national product. This point also is advanced as if it were unanswerable, as if criticism were therefore capricious and unreasonable.

This is an insidiously poisonous philosophy. It would fasten permanently on the people's backs the malignant, depressing burden of taxes which now prevails. There would be no way to escape from or lighten the burden because under this philosophy the Federal government would always siphon off—at a minimum—at least as much as it now takes out of every new dollar's worth of wealth which is developed, at least as much of the nation's labor and productive capacity as it now takes.

It is a philosophy which is preposterous and unacceptable.

Government does not have a natural right to any particular share of the nation's wealth, to any specified or proportional growth rate, to be of any particular size. There is no logic which supports such an idea.

Economists, to be sure, from time to time have projected estimates of the *maximum* portion government can draw out of the national economy without courting disaster. The most common range of these estimates is 25 to 30%. The total load of all government in this country—Federal, state and local—is now above that range. But it does not follow, from the fact that many economists have argued this is the load which is tolerable, that this is the load which should be continued as a matter of course, or as a matter of right.

Government is not a contributor to the nation's wealth, but a parasite which withdraws and consumes or dissipates part of what the people produce.

The outstanding fact about the proportionate size of the Federal government is that it is already too big. It takes too big a slice out of the national economy. The Kennedy administration itself has confessed this, in an oblique way, with its insistent petition for a tax cut, for the declared purpose of stimulating the economy.

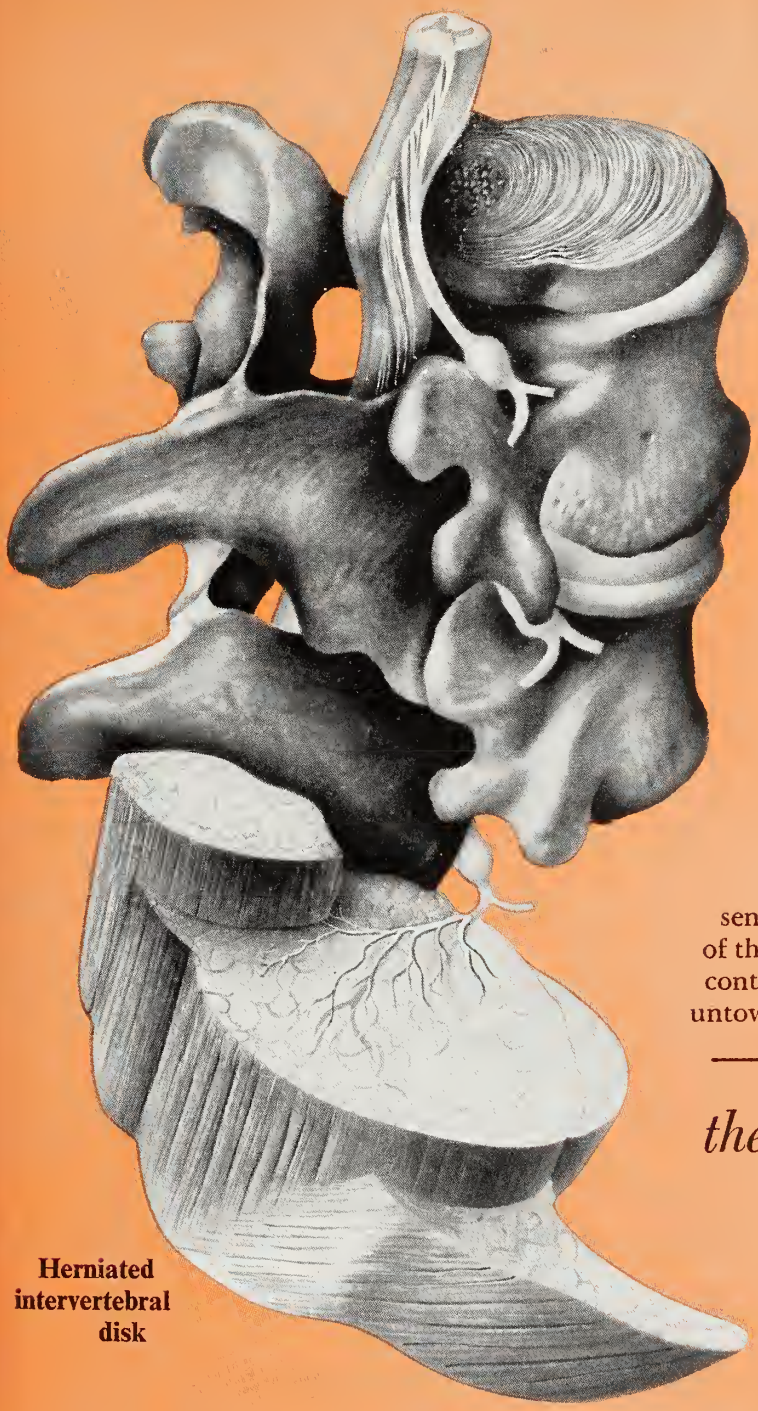
The economic well being of people can be improved only by raising the level of goods and services available to the people at a faster rate than the increase in the number of people. To keep government from nullifying the gains that are made, government must be restrained so that it takes out for its own use smaller and smaller proportions of the goods and services available. That's necessary in order that the people can have more.

Let's put a stop to this nonsense of trying to excuse expansion of the government by explaining that it's only keeping step with the growth in population and production. Let's get back to the principle that the size and cost of government should be determined by what really needs to be done, leaving the people to decide for themselves whether or not to do the other things.—*Indianapolis Star*, April 30, 1963.

Doctors, Consider This

At first glance, members of the medical profession who have chosen to practice in

Continued



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Continued

specialized fields might be inclined to bristle at the suggestion that all doctors graduating from medical schools be required to serve two or more years as general practitioners before being allowed to specialize.

This proposal was made by Dr. James D. Murphy of Fort Worth, president of the American Academy of General Practice, who said he will take his recommendation before the American Medical Association, which has the power to enforce such rulings.

Dr. Murphy said the mandatory two-year general practice would serve to curb the growing shortage of family doctors which could be so low by 1970 that there would be only one family doctor for every 2,700 Americans.

Dr. Murphy refuted the belief that a general practitioner has less prestige and a lower income than specialists. He said that a family holds no one in higher esteem than its family doctor and that the average general practitioner earns about the same as the average specialist.

"It's high time medicine—and by medicine I mean the A.M.A.—took the lead in the responsibility in this matter of providing medical men and women to take care of America's people," Dr. Murphy said.

The doctor's words hint the need for further reflection and analysis. The medical profession in the United States has done a superb job of running its own house. Americans have the highest standards of medical care in the world.

But should the number of general practitioners continue to skid, there is always the possibility of government intervention through legislation to seek to force corrective measures, a move that would be deplored by both the majority of the public and the medical profession.

Dr. Murphy's suggestion, at a second glance, might merit more thorough consideration by the entire medical fraternity.—*The Bloomington Herald-Telephone*, April 30, 1963.

The Proof Of The Pudding

The only way to restore adequate public control of government spending is to start looking for alternatives to government projects. But this never seems to happen under this administration.

A program is proposed to Congress to deal with some problem. Almost at once debate settles down on the questions of how much this program will cost and whether it can be afforded.

Seldom does anybody debate the fact that the problem may be met by other means. An assumption is made and silently accepted that the problem needs to be solved. By the time a proposition has been built up with careful promotion, it is assumed further that there is a "public demand" for solution. No one else has met the problem, and so the assumption is made that it is up to the government.

Yet if the question is seriously asked whether it would be possible to meet that same problem by local or private action, it usually will be found that this could be done. The fact is that people acting locally or privately simply have not chosen to deal with that problem by an organized program. And that fact is the real answer to the claim of "public demand." If the people really wanted the thing done, they would be doing it.

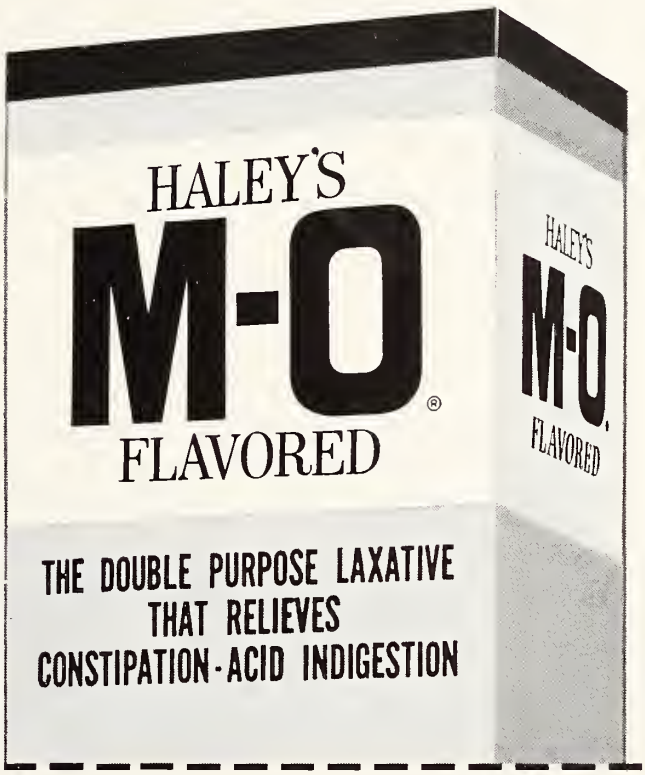
Congress ought never to approve any new Federal program without seriously asking whether it is something the people could and would be doing already if they really demanded it.

This holds true in the matter of stimulating the economy, also. Whenever this argument is advanced, Congress should look for proof that the proposed government spending actually would aid the economy more than the same amount of spending done by others. How else might the same money, or the same credit if it is deficit spending which is at issue, be used? What effect would these other methods have on the economy? Is the government way really better?

Can the government really smooth out "boom and bust" swings in the economy by

Continued

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FOURTH ESTATE

Continued

using its fiscal policy to offset the up and down trends? According to Dr. Emerson Schmidt, director of economic research of the United States Chamber of Commerce, there is no evidence that it can. In a statement prepared for the Joint Economic Committee of the House and Senate, he said there is no pattern, no systematic relation between the ups and downs of gross national product and the deficit or surplus position of the Federal budget, to indicate that budget deficits spurs the economy or that budget surplus tends to slow it down.

If that argument—a "counterbalance" effect on economic conditions—is going to be used to support deficit budgeting, then it is up to the supporters to prove that such an effect does in fact take place.

Both members of the Congress and the people should insist that claims of the need and the benefits of public spending programs be proved. Congress would then be in a better position to judge whether such programs are really desirable.—*Indianapolis Star*, May 14, 1963. ◄

About Our Cover

Happy Birthday! The American Veterinary Medical Association is celebrating its centennial.

The veterinary profession has, in the last 100 years, contributed greatly to the health and wellbeing of mankind and the nation's economy as well as to the health of animals.

It was a veterinarian who showed that carbon tetrachloride provided as practical a treatment for the eradication of hookworm in man as it did in animals; and it was a veterinarian who solved the mystery of botulism, thereby paving the way for the canned food industry.

Research by Dr. Cooper Curtice in 1893 proved that insects could transmit infection between animals and between animals and man, a discovery that led to the control of malaria and tick-born typhus and also made possible Major Walter Reed's conquest of yellow fever.



Dicoumarol, the potent anticoagulant, was isolated by veterinarian Dr. Frank Schofield whilst investigating the cause of sweet clover poisoning in cattle; the tranquillizing effects of reserpine were uncovered by veterinarian Alfred E. Earl whilst caring for animals in a drug research laboratory.

In the field of orthopedics, too, mankind owes a debt of gratitude to the veterinary profession. Dr. Otto Stader, a small animal practitioner in Illinois, developed the pin method for the repair of fractures. Colonel Harry Gorman, U.S.A.F. Veterinary Corps, having developed an artificial hip joint for dogs subsequently, working with orthopedists, successfully adapted this prosthesis to man.

In the 10 year period, 1947-57, veterinarians reduced the annual loss from brucellosis from 90 million dollars to 27 million dollars, the effectiveness of this eradication campaign has also greatly reduced the incidence of brucellosis in man—undulant fever.

Tuberculosis has been successfully eliminated in more than 99.5% of all U. S. cattle, with the result that bone and glandular T.B. is now rare in humans.

Every livestock disease conquered or controlled by the profession saves millions of dollars that would otherwise have been lost along with the disease-stricken animals. This financial saving affects all of us but, more important, every advance in animal health means an advance in human health.

The Journal takes great pleasure in paying a small tribute to the members of the American Veterinary Medical Association in this issue and wishes them many happy returns.

Our cover shows the postoperative treatment of squamous cell carcinoma in a Hereford beef cow, using the 300 kilovolt therapy x-ray machine at the School of Veterinary Science and Medicine at Purdue University. *The Journal* is very grateful to Purdue University for their kindness in making this picture available.—M.E.R.

The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 56 — July 1963 — Number 7

Delayed Genesis of Gamma Globulins

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Fort Wayne

ON EVERY MEDICAL practice dealing with children, it is evident that some children have more frequent respiratory infections than others. It is also evident that sometimes several children in a family are so affected but seem to "out-grow" the handicap after attaining a certain age, usually before the second grade in school.

The grandparents speak of these children as appearing "peaked." For the physician it is difficult to characterize what is meant by this term except that they have a pasty pallor, are irritable and lack normal interest and energy. To the author, while treating a case of hypogammaglobulinemia, one cause of this syndrome has become evident.

Case History

A one-year-old boy (Case 1) had four hemoglobin determinations because of pallor associated with recurrent purulent infections. After receiving the calculated dose of immune globulin,* his appearance became a normal warm pink the next day. This observation has been repeated in more than 20 patients. Most of the omissions of this observation occurred early in the series before we were aware of the change. This phenomenon has now become an important sign to look for in patients suspected of having hypogammaglobulinemia.

The purpose of this paper is to present the syndrome of the "peaked child." The entity seems to occur sometimes in families (Cases 2a, 2b, 2c and 8a, 8b as well as others not as well documented). Purulent infections of seriously recurrent nature, especially purulent otitis media and asthmatoid pneumonitis, are illnesses which should first cause the physician to consider this diagnosis. The pasty pallor of these children is marked. Electrophoretic determination of gamma globulin will establish the diagnosis. Remarkable relief from the recurrent infections occurs when gamma globulins are administered and the child's complexion acquires the warm complexion long associated with health within 24 hours. This is not a flush but a deeper, warm pink color.

Material and Methods

Thirty-six children seen in the author's private and consultative practice between November, 1959 and March, 1962 are included. These children were selected because they were having an inordinate number of recurring purulent infections. They all had gamma globulin determinations† as part of routine work-ups.

After the gamma globulin determination indicated less than .7 gm.%, the children

* All immune globulin used in this study was supplied free of charge by the American Red Cross.

† Using standard procedures on the Durrum Cell made by the Spinco Company.

were given immune globulin 1.2 cc./kg. body weight as a priming dose followed by .6 cc./kg. each month for five additional injections. Treatment was then discontinued for two or more months, and the gamma globulins were redetermined.

If the clinical response had been good and the new determination still distinctly lower than .7 gm.% and/or there had been clinical relapse with a determination nearer but still below .7 gm.%, the course of immune globulin determination was repeated.

Clinical response was listed as excellent if, during the course of treatment, no illness characterizing the previous state occurred. If the severity of the infections was estimated to be reduced more than three-quarters, response is listed as good—there were no failures.

Spontaneous comment from the parents caused us to list personality improvement. What they meant was a switch from a whining, inactive, fatigued child with poor appetite to one who was pleasant, active and usually had good appetite.

After the dramatic demonstration in Case 1 of the resolution of the pallor of the "peaked child," all parents were asked to communicate the next day as to any physical change they noted in their children. The comment was spontaneous in at least one-half the cases and was easily brought out in discussion in the others. Most were confirmed by the author.

Because allergy was suggested by the asthmatoid pneumonitis which kept recurring in the study, a listing of this tendency was included. To be listed as positive, either the patient, sibling or parent had to have unequivocal allergic disease confirmed by skin tests, nasal eosinophil smears, or personal observation of the examiner. The incidence was high but, since the author practices allergy as a subspecialty, it is unclear if selection may not have played a part.

A summary of the diagnoses of these children is tabulated in Table I.

Otitis refers to multiple bouts of purulent otitis media requiring antibiotics and myringotomy; many children had eight to 12 episodes.

Asthmatoid pneumonitis refers to repeated episodes of an acute illness affecting both lungs, though sometimes one portion more than others. These episodes were associated with fever, usually elevated white blood cell counts with no eosinophiles. Physical examination revealed much dyspnea, emphysema and expiratory wheezing sometimes with rales. Adrenalin and theophylline preparations gave no response. When the emphysema was relieved, roentgenograms revealed patchy pneumonitis. Cases 12a, 13 and 14 had dry, fine generalized wheezing at all times until immune globulin was given. Cases 15 and 22 actually had atopic bronchial asthma and these attacks were relatively easily differentiated from asthmatoid pneumonitis.

Typical Case Reports

Case 14

Age one year, constant wheezing heard in chest, pallor, hemoglobin 11.5, gamma globulin .43 gm.%.

At birth cephalohematoma and convulsions, phenobarbital prophylaxis.

3 mo. purulent otitis, chest wheezes.
4 mo. chest wheezes.
9 mo. purulent otitis.
10 mo. purulent otitis, myringotomy.
12 mo. purulent otitis, bronchitis.
13 mo. purulent otitis, asthmatoid pneumonitis.
14 mo. serous otitis, bronchitis. gamma globulin started.
2 yr. bullous otitis.

Response to Treatment: "Normal child" as soon as gamma globulin started, color improved, stopped whining, no wheezing heard.

Family History

Mother: Hay fever, asthma.
Father: No information.
Male Sibling: Perennial allergic rhinitis, bronchitis, recurrent parotitis.
Female Sibling: Three purulent otitis second year, one pneumonitis.

Comment: The dry, faint, fine expiratory wheezing heard in this child's chest at all times was not relieved by anti-asthma medication. Went away and stayed away after gamma globulin was started.

Hypogammaglobulinemia patients, age at diagnosis and clinical details

Case	Sex	Age	Gamma Globulin Gm. %	Clinical Response	Peaked Response	Personality Response	Allergy Positive	Type of Illnesses
1	M	15 mo.	.12	excellent	present	present	present	atitis, pneumonitis
2o	M	6 ma.	.1	good	present	present		osthmotoid pneumonitis, otitis, rectol abscess
2b	M	9 mo.	.36	excellent	present	present		otitis media, respirotory infection
3	M	5 yr.	.2	excellent	?	present	present	pneumonitis
4	M	6 yr.	.3	excellent	present	present		pneumanitis, thrombocytopenio, tonsillitis (T&A done)
5	M	26 ma.	.51	good	present	present	present	otitis, pneumanitis
6a	F	8 mo.	.25	excellent			present	asthmataid pneumonitis
7	M	18 mo.	.37	good	present	present		otitis, pneumanitis, upper respirotory infection, fever of undetermined arigin
8a	F	3 yr.	.29	excellent	present	present	present	otitis, pyelitis
8b	F	15 ma.	.17	excellent	present	present	present	atitis, asthmotoid pneumonitis, phoryngitis
9	M	7 mo.	.06	excellent	present	present		osthmotaid pneumanitis, otitis, tonsillitis, urinory infection
10	M	16 mo.	.29	excellent	present	present		otitis, tansillitis, asthmotaid pneumonitis
11	M	11 mo.	.27	excellent	present	present		atitis medio, asthmataid pneumonitis
12o	M	16 mo.	.29	excellent	present	present	present	asthmatoid pneumonitis
13	M	7 mo.	.08	excellent	present	present		osthmotoid pneumonitis, atitis
14	M	12 mo.	.43	excellent	present	present	present	asthmatoid pneumonitis, otitis
15	F	6 yr.	.41	excellent	present	present	present	osthmo, pneumonio, otitis
16	M	9 mo.	.25	excellent	present	present	present	otitis
17	F	22 mo.	.29	excellent	present	present		otitis
18	M	35 mo.	.51	excellent	present		present	asthmatoid pneumonitis
19	M	2½ yr.	.24	excellent	present	present		pneumonitis, otitis
20	M	7 mo.	.164	excellent	present		present	otitis, osthmatoid pneumanitis
21	M	15 mo.	.48	excellent	present	present	present	osthmotoid pneumonitis
22	M	6 mo.	.04	excellent		present	present	atitis medio, osthmo

TABLE I

Case 8a

Age 34 mo. peaked pallor, hemoglobin 12, gamma globulin .29 gm.%.

5 mo. purulent otitis, pneumonitis.
6 mo. purulent otitis, pneumonitis, asthma (?), myringotomy.
7 mo. purulent otitis, myringotomy, bronchitis.
8 mo. erysipelas.
10 mo. catarrhal otitis, bronchitis, impetigo.
10 mo. tonsillitis, purulent conjunctivitis.
11 mo. secretory otitis.
11 mo. purulent otitis — spontaneous drainage.
12 mo. purulent otitis media.
19 mo. secretory otitis.
23 mo. purulent otitis.
24 mo. catarrhal otitis, thrush.
28 mo. catarrhal otitis, herpangina.
30 mo. purulent otitis, myringotomy.
31 mo. purulent otitis, urinary tract infection.
32 mo. catarrhal otitis, tonsillitis.
34 mo. catarrhal otitis, bronchitis, tonsillitis.
gamma globulin started.
36 mo. asthmatoid pneumonitis.
41 mo. herpes simplex.
53 mo. herpes zoster.

Response to Treatment: "Normal child" as soon as gamma globulin started, active, sleeping better, eating better. Skin color became normal. Recurrence of opposite at end of two month withdrawal period.

Family History

Mother: Contact allergic dermatitis.
Father: Frequent otitis until age 13.
Female Sibling: Hypogammaglobulinemia (8b) at age three, while on period of withdrawal from gamma globulin developed otitis which, in spite of gamma

globulin and antibiotic progressed into cholesteatoma and mastoidectomy; chickenpox three times.

Male Sibling: Behavior disorder. Ordinary infection experience.

Case 3

Age five years, two months, pallor, hemoglobin 13, gamma globulin .2 gm.%.

Adopted child of physician, first seen at age four and one-half years. History, constant persistent cough, on antibiotics almost continuously. Had oxygen tent and cold steam at home—slept in tent almost every night. Wounds did not heal. Chest x-ray revealed persistent streaking infiltrates, especially in right middle lung. Tuberculosis and cystic fibrosis were ruled out. Skin tests verified allergy to inhalants. Hyposensitization improved one-third. Reading disability, behavior problem in school and neighborhood necessitating residential treatment.

Response to Treatment: Gamma globulin determined at five years. Treatment instituted with complete resolution of respiratory symptoms. Color good after treatment, noted pale before, but this case occurred before relationship had been noted, so immediate "peaked" response not certain. Behavior improved too but was under different environment for treatment of behavior disorder.

Family History

Mother: Unknown.

Father: Unknown.

Female ½ Sibling: Asthma under treatment.

Case 1

Age 15 mo., peaked pallor, hemoglobin 12.8, 13.2, gamma globulin .12 gm.%.

3 mo. thrush.

3½ mo. wheezing and coughing, left upper lung expiratory wheezes, nasal eosinophil smear negative.

4 mo. purulent rhinitis, asthmatoid pneumonitis.

4½ mo. catarrhal otitis, asthmatoid pneumonitis, thrush.

5 mo. thrush, pneumonitis.

6 mo. purulent otitis media, myringotomy.

10 mo. secretory otitis.

11 mo. purulent otitis.

12 mo. purulent otitis.

13 mo. purulent otitis.

14 mo. pneumonitis.

15 mo. purulent otitis.
gamma globulin .12 gm.%.
gamma globulin started 15 mo.

19 mo. secretory otitis.

While gamma globulin discontinued fever and beginning pneumonitis, in spite of resumption of gamma globulin, mild pneumonitis developed. Gamma globulin .69 gm.%.

36 mo. (no gamma globulin for 7 mo.) purulent otitis, bronchitis.

38 mo. tonsillectomy and adenoidectomy with myringotomy.
gamma globulin 1.17 gm.%.

39 mo. purulent otitis.

40 mo. bullous myringitis.

41 mo. furuncle right knuckle.

Response to Treatment: "Normal child" as soon as gamma globulin started; active, ate better, color normal.

Family History

Mother: contact allergy to cashmere and angora.

Father: gave similar infection history as small child.

Male Sibling: five otitis, one external otitis, two maxillary sinusitis all in first two years.

Female Sibling: Atopic dermatitis severe, no more than usual infections.

Male Sibling (second): during third year four purulent otitis, two purulent rhinitis, two pneumonitis, three plus nasal eosinophil smear.

Comment: When tonsillectomy and adenoidectomy was done at 38 mo. 15 cc. gamma globulin was given. This did not prevent otitis next month. (The gamma globulin was 1.17 gm.% before it was given.)

Comment

Table I exhibits details of those cases who had at least one gamma globulin determination, were over six months of age and who had at least one dose of immune globulin. The course of follow up was sufficient to enable evaluation of responses. In

Patients on whom multiple determinations of gamma globulin were done.

Case	Sex	Age	Gamma Globulin Gm. %	Case	Sex	Age	Gamma Globulin Gm. %	Case	Sex	Age	Gamma Globulin Gm. %
1	M	15 mo.	.12	24NT	F	6 mo.	.38	12o	M	16 mo.	.29
		22 mo.	.69			26 mo.	.7			23 mo.	.56
		24 mo.	.65	7	M	18 mo.	.37			35 mo.	.76
		35 mo.	1.17			24 mo.	.6	13	M	7 mo.	.08
2a	M	6 mo.	.1			38 mo.	.632			16 mo.	.55
		10 mo.	.4	8o	F	34 mo.	.29			23 mo.	.35
		13 mo.	.37			41 mo.	.46	14	M	12 mo.	.43
		26 mo.	.28			4 yr.	.32			21 mo.	.54
2c	F	3 mo.	.1	8b	F	15 mo.	.17	15	F	6 yr.	.41
		9 mo.	.6			23 mo.	.65			6½ yr.	.24
23NT	M	8 yr.	.7			30 mo.	.24	16	M	9 mo.	.25
		9 yr.	.9	9	M	7 mo.	.06			17 mo.	.43
3	M	5 yr.	.2			12 mo.	.57	18	M	35 mo.	.51
		6 yr.	.33			2 yr.	.72			41 mo.	.46
		7 yr.	.47	10	M	16 mo.	.29			4 yr.	1.0
4NT	M	5½ yr.	.3			28 mo.	.54	22	M	6 mo.	.04
		6 yr.	.66			3 yr.	.56			1 yr.	.37
5	M	26 mo.	.51	11	M	11 mo.	.27				
		34 mo.	.77			19 mo.	.55				
						30 mo.	.43				

NT—Not Treated

TABLE II

a number of cases the period of observation exceeds two years.

Table II exhibits serial determinations to demonstrate the course of levels of gamma globulin. If the patient was being treated, he had not had an injection of immune globulin for at least two months at the time the blood was drawn. Two patients (Cases 23 & 24) were not given immune globulin. Case 23 was treated by antibiotics and hyposensitization because we thought he was about to outgrow the syndrome. Case 24 had been transferred out of the city before the determination was reported and the report did not catch up until one year later. At that time she was having tonsillo-adenoidectomy as treatment for recurrent purulent otitis media. The gamma globulin determination done at that hospitalization was .7 gm.%.

All patients except six (Cases 2a, 8a, 8b, 11, 13, 15) showed a progressive rise in gamma globulin levels. When the level was above .7 gm.%, injections were stopped and the patient continued to remain in normally good health and color.

Table III indicates determinations of gamma globulin on several children who, by history and observation of the patient and considering the previously observed course of older siblings, would seem to be in the process of outgrowing their delayed genesis of gamma globulins.

It seems evident from perusal of the foregoing study, as well as common pediatric experience, that there is a group of children who have more than their share of purulent infections. The most frequent illnesses seem to be purulent otitis media and asthmatoid pneumonitis. Some families have more than one individual involved. The author feels

These patients gave similar histories but were in process of outgrowing syndrome. Other siblings had had similar courses of infections and had outgrown them.

Case	Sex	Age	Gamma Globulin Gm. %
25	M	10½ yr.	.67
26	M	3½ yr.	.62
27	M	9 yr.	.6
29	M	6 yr.	.6
30	M	9 yr.	.69
23	M	8 yr.	.7
6b	M	3½ yr.	.7
31	F	5 yr.	.65

TABLE III

that perhaps some of these children have survived at present only because of "overuse of antibiotics," which has been properly decried in many teaching centers. When hypogammaglobulinemia is proved, these children can be treated appropriately by substitution therapy and no longer need so many antibiotics. If no hypogammaglobulinemia is demonstrated, there is no reason to feel administration of immune globulin will be of value.

Cases 27, 6b, 31 were the youngest members of families whose older siblings had clinical courses similar to the reported syndrome. These patients were gradually acquiring resistance to infections at the time the determinations were done, and their gamma globulin levels were just below the accepted normal value of .7 gm.%. This suggests that they, as a family, may have had this syndrome.

Other physical findings present in the majority of these children were small tonsils, adenoids and lymph nodes. In Cases 4, 17, 5 the tonsils were enlarged, and the gamma globulin levels improved after their removal.

In patients with gamma globulin levels between .6 and .7 gm.% the author used drug prophylaxis, respiratory vaccines and allergy hyposensitization to stimulate antibody development. In three patients, not included in this series because their gamma globulin levels were between .7 and .8 gm.%, the history and typical pallor led us to give a trial dose of immune globulin (from commercial sources). The immediate, dramatic improvement of the pallor associated with the cessation of recurrent infections has caused us to continue replacement through the present respiratory disease season.

Summary

Twenty-four patients are reported with recurrent respiratory infections associated with hypogammaglobulinemia and their dramatically improved response to replacement treatment with immune globulin.

The association of the above clinical situation with a transparent, pallid appearance described by the grandparents as "looking peaked" as a diagnostic aid is emphasized.

The possibility that this is a genetically controlled syndrome is suggested by some familial cases, and the common pediatric observation of the clinical syndrome in certain families.

Where hypogammaglobulinemia can be proved, replacement with immune globulin has been very dramatic in improving the clinical courses of these children.

It is suggested that the natural course of this syndrome is for these children to develop normal levels of gamma globulin near their seventh year rather that at six months as in the normal child.

When the gamma globulin levels are normal, there is no reason to feel immune globulin administration is of benefit.

Acknowledgment

My acknowledgment and thanks to the many referring physicians and colleagues who have aided me in following these children and substantiating these findings in many other children than we reported here. Doctor H. C. Harvey has been instrumental in obtaining Red Cross immune globulin for the treatment of these cases, and without his help and the generosity of the American Red Cross, this project could not have been developed. ◄

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Fort Wayne, Indiana

Metronidazole

An Effective Oral Medication for the Treatment of Trichomonas Vaginalis Vaginitis

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PROBABLY THE MOST distressing problem the physician encounters in women is trichomonas vaginalis vaginitis. It is estimated that one out of every five women is bothered by this organism. Its malodorous leucorrhea and perineal irritation leads to dyspareunia with its resulting personal and marital problems. Only about three percent of the women with T. vaginalis remain asymptomatic.

Although it is considered a benign condition in that it is never fatal, the chronic irritation to the vagina and cervix can result in suspicious cytological smears and subject the patient to unnecessary conizations and biopsies. Indeed, if chronic irritation of the cervix is a causative factor in carcinoma, vaginitis may play other than a benign role.

The chronic nature of the infestation, its prevalence and poor cure rate has prompted the marketing of many medications for its treatment. Jellies, creams, suppositories, oral tablets and douche solutions all have been recommended in the past. These preparations were supposed to acidify, kill by contact, increase tissue resistance or even explode the organism like a tiny firecracker. At the present time 55 products are listed in the "Physician's Desk Reference." I have not tried all these products but have hopefully prescribed most of them at one time or another.

Highly Resistant to Medication

T. vaginalis grows very poorly in vitro. This makes culture difficult and probably enhances the theoretical curative powers of most medications. This same organism is so prolific in vivo that eradication has been almost impossible. The flagellated organisms collect in the microscopic folds of the vaginal mucosa as well as in the bladder and Skene's glands. Therefore local vaginal treatment is unable to reach all the organisms and reinfection is common. T. vaginalis enters the genital tract of the husband where it usually is asymptomatic but is responsible for reinfection by a ping pong effect.

My experience in the past seems to be typical of most published accounts of treatment with the above products. Temporary remission is obtained in about 70% of the cases and an additional 10% can be helped by using several medications plus vigorous local scrubbing of the vagina several times a week with an acid detergent. However, the remaining 20% have been resistant to all treatment.

In September of 1960 Flagyl was introduced to the United States for clinical investigation. Flagyl is the G. D. Searle trade name of Metronidazole which was originally developed in France and is now in widespread use in Europe, Great Britain and Canada. It is an oral 250 mgm. tablet that is usually taken three times daily.

New Oral Tablet Effective

For the past eight months I have used Flagyl for 25 of my most resistant cases of T. vaginalis. Most of these patients had a history of infestation of several years duration and there were several who had been treated periodically for over 10 years. The diagnosis, aside from symptomatology, was made by direct smear examination and culture when possible. T. vaginalis was identified in all the smears but cultures were not always positive, a finding I consider due to the difficulty in culturing the organism.

The recommended course of treatment was three tablets daily for 10 days for the

patient and two tablets daily for 10 days for the husband. White blood cell counts and urine bile determinations were done before treatment and 10 days following treatment. In no case was there any significant difference. Seven to 10 days after the course of treatment, repeat microscopic examinations of the vaginal secretion were done although this is probably unnecessary as the patients consistently reported that they were symptom free.

Post-treatment examination was negative for T. vaginalis in all the patients treated. In two patients, who still had symptoms, the discharge had changed to that typical of Monilia and culture was positive for Monilia. Subsequently, anti-monilial treatment cleared these symptoms up. These patients have been followed from one to eight months and there have been no recurrences.

One patient stayed on Flagyl for only three days as the symptoms had disappeared in that time and she did not think further medication was necessary. She has had no recurrence in six months which may indicate that the eventual course of treatment will not have to be as long as is now recommended.

This 100% cure rate has been reported by other investigators. Some others report lesser rates which are still higher than any obtained by other medication.

Side reactions to the medication were infrequent. One male reported a slight headache while taking the medication and several patients complained of mild nausea which was relieved with anti-nauseants.

Drug Should Be Given Approval

In spite of the excellent results from the use of Flagyl, the medication is still not available on prescription in the United States. The G. D. Searle Company has been trying since 1960 to obtain the Federal Drug Administration's approval, without success. The F.D.A. has been cautious to the extreme and apparently has refused permission based on its belief that T. vaginalis is a relatively benign condition and that the drug contains a nitro group which could cause possible blood dyscrasia.

High doses over extended periods of time have caused neurological changes in dogs. European and American investigators have failed to find any significant side reactions in humans or laboratory animals other than the stated neurological changes in dogs.

Enough clinical investigation, as well as actual general use, in other countries would seem to have brought the general knowledge about Flagyl beyond the investigational stage. In my opinion as well as in the opinion of many investigators, Flagyl should be released for prescription use. Then it will no longer be necessary to sympathize with our patients and hope for their temporary relief from symptoms of T. vaginalis. American physicians then can be as reasonably sure of curing their patients as their counterparts in Europe, Great Britain and Canada are NOW.

Addendum

Since this paper was submitted for publication in July, 1962, I have treated approximately 25 additional patients with Flagyl with the same results. The follow-up on the original 25 patients has been extended another 11 months and there have been no cases of reoccurrence of T. vaginalis to my knowledge. ◄

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Male Infertility

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EASTMAN HAS INDICATED that, "Some ten percent of all marriages are barren." Furthermore, "In one-third to one-half of barren unions, the husband is responsible for the difficulty."[1]

While the wife, in the vast majority of instances, is the first to consult a physician about her inability to become pregnant, unless there is special reason to believe that the wife is totally incapable of conception, the best practice is to suggest that the husband submit himself for examination prior to detailed tests on the wife.[1]

In evaluating the male, it is wise to keep in mind that about 50% of male infertility is apparently due to faulty or lethal genes, and as such is irreversible.[2] As Williams points out, "If a sperm population contains no sperm capable of causing fertilization, the addition of another one hundred million spermia of no better quality will fail to improve fertilization.

"The problem of male infertility then is very frequently that of diagnosis, prognosis and protection of the individual from the vast array of absolutely worthless therapies to which male patients have been subjected in the past few years."[2]

Semen and Semen Analysis

Going beyond very basic data (i.e., sperm chemical composition, metabolism, etc.) one is confronted by what is probably the first essential concept in the clinical approach to male infertility study, namely, what constitutes a normal semen.

In the following outline of semen analysis (after Hotchkiss) an attempt will be made to present the current thinking on this in order to provide the reader with some baseline with which to work. It is emphasized however, that the concept of normality has been a changing one and as such the data presented here may not be the final word.

Before entering the discussion of semen analysis per se, a word regarding semen collection is in order. One should always insure, as well as possible, that the semen specimen is collected from the person to be evaluated. The use of a condom to do this is unreliable.[1, 3]

While there are some special methods of collection[4], most authors feel that the specimen obtained in a dry, clean, wide-mouth jar is most desirable. The specimen is preferably obtained by masturbation after a three-day period of sexual continence. It should be carefully labeled with the patient's name and time of collection and should be presented within two hours of the time of collection if possible.[1, 3, 5, 6, 7]

Returning now to the discussion of semen analysis, the appraisal of fertility is usually based on five principal items. These include consideration of: (a) Appearance and volume; (b) Viscosity; (c) Motility; (d) The cell count; and (e) The stained smear for abnormal cell count (morphology).

(a) *Appearance and volume*

Fresh ejaculate is a white, opalescent mixture of a gelatinous nature which liquifies in approximately three to 15 minutes so that when seen by the examiner it is usually more translucent and less viscid than it was at first.[1]

For clinical purposes one can expect to find a seminal ejaculate volume of approximately three to three and four-tenths cc.'s when obtained from a normal fertile male, by masturbation into a glass receptacle, after three days of sexual continence.[1, 5, 8, 10]

(b) *Viscosity*

Semen viscosity is highly variable. The

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significance of viscosity is not clearly known, although Hotchkiss suspects that increased viscosity can hamper sperm progress merely by presenting a mechanical barrier as well as by reducing their longevity due to the increased metabolism needed to move through a thick media.[1]

A simple method of estimating viscosity is to stir the semen with an applicator stick and judge its tenacity as the stick is withdrawn above the surface. Normally the semen will drip off the stick, but with increased viscosity it will string out from the seminal mass.

(c) *Motility*

It is the present concept that a spermatozoon must possess motile activity in order to reach and fertilize the ovum. In view of this, even a high sperm count may not allow for conception unless a certain percentage of the cells show motile activity. MacLeod and Gold have shown that potential fertility is much more closely related to motile activity than to sperm count.[7, 9] They further feel that 40% active cells and a quality of over two represent the lower level in normal fertility.[9, 11] Quality refers to the degree of motility, where zero is no motility and four is excellent motility.[1] Weinberg's work implies that good motility can compensate for a somewhat lowered sperm count.[12]

Although there is more than one way to do the motility determination, the method outlined by Hotchkiss is a practical one for office use.[1]

Hotchkiss evaluates motility by placing a drop of semen on a glass slide. He covers it with a cover slip, and examines it under a microscope that is prepared by placing a disc of black paper, with a one quarter area cut out, in the microscope occular. He then counts the number of *motile* cells seen in the quartered field over a ten second interval. All of the cells, active and inactive, are then counted. Each number is then multiplied by four, the figure obtained for the total number of cells is divided by the figure obtained for motile cells and the quotient multiplied by 100 to obtain the "percentage of motile cells." "Percentage of motile cells" can also be evaluated by the use of the eosin-nigrosin stain as described below in the section on morphology.

It would probably be most significant to make the motility study shortly after ejaculation, however, since it is often difficult to get the specimen so soon or to have the exam done so soon, it would seem wise, in light of MacLeod and Gold's finding,[9] to run the study approximately five hours from ejaculation.

(d) *The cell count*

According to Hotchkiss there is no evidence to indicate that any one cell count figure can be established below which conception is impossible.[1] Of course, one can make a diagnosis of absolute sterility, but this is warranted only when the specimen is completely devoid of sperm. Over the years, the estimated lower limit of normal cell count has gradually worked its way down. The current thinking appears to be that 20,000,000 sperm per cc. of ejaculate seems to be the crucial level, not only from the viewpoint of causing conception, but also in terms of loss of conception.[11, 13] Cases are reported, however, of conception occurring with the count well below that figure.[14]

(e) *Morphology*

MacLeod and Gold point out that like motility, a rising fertility potential is to be found with an increasing proportion of oval type cells. They feel that 60% morphologically normal cells is the minimum for normal fertility.[11]

A method for obtaining an accurate estimate of the spermatic form and structure is absolutely dependent upon study of the stained smear of the semen.[1]

Numerous stains are described for visualizing the sperm. For example, the eosin-nigrosin stain.[15] To prepare an eosin-nigrosin stain of semen, place a drop of semen approximately the size of a pin-head on a degreased glass slide. Then, place a drop of eosin, about twice the size of the semen drop, on the slide and follow this with a nigrosin drop approximately twice the size of the eosin drop.

With a glass rod, mix the semen first with the eosin and then with the nigrosin. Mix for only a few seconds and then smear out

a thin layer with the glass rod. The mixing and smearing must not exceed one minute. Dry the slide over a flame and it is ready for observation which is best accomplished under oil.

The background will be brownish-violet. The sperm that were live will *not* be stained, while the dead sperm will take up the eosin and appear red, thus allowing for easy determination of the percentage of motile (live) cells as well as examining for cell morphology.

Diagnosis in Male Sterility

Howard, Simmons, and Sniffen[16] have classified 109 cases of male sterility, studied by history, physical examination, semen analysis, urinary assay of gonadotropins (F.S.H.) and 17-ketosteroids and testicular biopsy.

Their findings are grouped as follows:

A. *Conditions with low F.S.H. excretion:*
 1. Eunuchoidism with low F.S.H.

B. *Conditions with high F.S.H. excretion:*
 1. Sclerosing tubular degeneration (Klinefelter's syndrome).
 2. Interstitial fibrosis
 3. Absence of germ cells

C. *Conditions with normal F.S.H. excretion:*
 1. Hypospermatogenesis
 2. Arrest of maturation in spermatogenesis
 3. Oligospermia with normal testicular histology
 4. Obstructions of the ductal system

Only four of the above eight categories are indicated as being possibly amenable to therapy. The authors also indicate that testicular biopsy is absolutely indicated in cases of complete azoospermia. The technic of testicular biopsy has been described by Charny.[17]

Among other conditions leading to sterility are: (a) Retrograde ejaculation,[18] (b) Auto-antibodies against spermatozoa,[19] (c) Bacterial infection of semen,[12,20,21] (d) Poor diet,[22] and (e) Low sperm D.N.A. (Desoxyribonucleic Acid).[23]

Diagnosing the Infertile Male

Evaluation should include: (a) History, (b) General physical examination, (c) Detailed examination of the genitalia, (d) Laboratory data (routine and special) and (e) Special diagnostic tests. Persons interested in sterility work would do well to refer to any standard text on male sterility for a detailed discussion.

(a & b) *History and Physical*

An outline for history and physical examination, such as demonstrated by Hotchkiss in his test "Fertility in Men" is a valuable guide.[1]

In doing the physical examination, particular attention should be paid to body habitus, skin texture, hair distribution, voice and appearance of breasts.

(c) *Detailed Examination of Genitalia*

This should include careful palpation of the prostate and area of the seminal vesicles in addition to examination of the external genitalia.

(d) *Laboratory Data*

Routine: Urinalysis (two glass specimen). Prostatic secretion, CBC, serology, semen analysis and P.B.I.

Special: X-ray of sella turcica, hormone assay.

(e) *Special Diagnostic Tests*

Endoscopy, Testicular biopsy, x-ray studies of epididymis, seminal vesicles, and vas deferens,[24] urethrograms.[25]

Treatment of Infertility

A discussion of the treatment of male infertility is perhaps well introduced by repeating that 50% (or more) of male infertility is non-treatable.

For those patients who fall into infertile categories where there is no current therapy available, it is wise to avoid telling them that they will never be able to have children. It is perhaps far better to inform these patients that on the basis of your studies, it is *exceedingly unlikely* that they will be able to effect impregnation. To bolster the patient emotionally, he can be placed on a routine of general hygienic improvement, i.e., sufficient rest, exercise and improvement of diet with added vitamins and mineral supplement. He should be emphatically told that at the present time there is no other therapy available; for, if the physician is able to prevent such a

patient from turning to a "quack" for extensive as well as expensive yet totally ineffective therapy, he is doing the patient a great service. Also, arranging for counseling regarding adoption of children will be of aid to the genuinely infertile patient.

Treatable forms of infertility can be divided into four groups:

1. Patients who need guidance in sexual technic.
2. Patients who need psychiatric guidance.
3. Patients who need surgical therapy.
4. Patients who may be aided by medication.

These categories will be discussed below.

For many reasons the technics followed in sexual relations may interfere with fertilization when both parties actually are normal. Hotchkiss tells of a college professor who was not achieving vaginal penetration and didn't realize it.[1] A patient may have a borderline normal semen and yet ruin his chances of achieving fertilization by using vaseline as a lubricant. The patient in his desire to impregnate his wife, may have relations so frequently as to actually hamper impregnation by the time her ovulatory period occurs.[8] Likewise, prolonged sexual continence may interfere with impregnation because sperm motility will become impaired.[9]

It should be obvious that only detailed history taking, as well as a good physician-patient relationship will elicit defects in sexual technic and enable their remedy.

Some men, because of emotional difficulties, are unable to cause impregnation despite normal semen. Rutherford, for example, discusses the effects of tension on infertility in males and females.[26] Abarbanel and Bach note that "some preliminary studies seem to indicate that the quality of the spermatozoa may be negatively affected when sexual responses are induced under artificial or conflict-ridden conditions."

The male who, unconsciously, does not desire to have a child, may meet this desire by premature ejaculation, inability to achieve or maintain an erection or inability to achieve orgasm. Likewise, a barren couple may be having sexual relations only once or twice a month or at greater intervals, and the lack of sexual relations can well be due to marital tensions or other anxieties.

Again, careful history taking and good physician-patient relationship will be necessary to elicit the emotional causes of this type of infertility. If the source of tension and anxiety is not profound, the examining physician may well be able to handle it. Otherwise, psychiatric aid is recommended.

Male infertility may be found to be due to an obstructive phenomenon in the genital tract. Operative technics are available for by-passing blocked areas in the epididymis or vas, for reconstructing continuity of the vas and for relieving a urethral diverticulum or stricture.

Occasionally, the infertile male can be helped by drug therapy. Some medications that have been used include testosterone,[27, 28] gonadotrophins[29, 30, 31] methylandrostenediol,[32] steroids,[33] thyroid extract,[30] and liothyronine (Cytomel).[34, 35]

Of these, Cytomel enjoys current frequent use. Farris and Colton (who, incidentally, claim that desiccated thyroid produces no significant changes in semen) gave Cytomel in five microgram daily doses and increased the dose at two week intervals to 12½, 25, and finally 50 micrograms daily. Semen analysis was done after two weeks on each dose.[34]

Reed, Browning and O'Donnell used five micrograms of Cytomel daily to start and gradually increased the dose to only 15 micrograms daily depending on the patient's response. Their findings essentially concur with those of Farris and Colton.[35]

While the reports on the use of Cytomel are encouraging, it is probably well to heed the repeated theme of this paper, that most infertile males will not be helped.

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An Evaluation of Mebutamate (Capla)*

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ESSENTIAL HYPERTENSION manifests itself as a generalized disease of the entire vascular system including the kidneys, heart and brain.[1] This association of hypertension and vascular degeneration may be due to prolonged increased stress on the vascular system. Actuarial statistics indicate that length of survival and degree of hypertension are inversely related. Thus, it would follow that mild hypertension carries with it an increased hazard to the patient. This should be remembered when treatment is considered.

Mebutamate has been reported to be a centrally acting antihypertension agent with no serious side effects. Using a double blind technic, we have observed the effectiveness and side effects of mebutamate on 14 patients. In addition, since there has been very little information in the literature concerning the mechanism of action of mebutamate, we have included such information as is available to us.

Mechanism of Action

In a crossover experiment involving two dogs, all the vessels of a limb of the first dog were tied off and the limb perfused with blood from the second dog. The injection of mebutamate into the first dog caused a 40 to 50% rise in blood flow through that animal's isolated limb. There was no contact of the drug with any receptor site in the isolated limb, but the major nerve supply to that limb was left intact, and it is presumed that the vasodilation was on a neurogenic basis. Also it was found that the blood pressure rise usually associated with stimulation of certain areas of the medulla and hypothalamus could be counteracted by mebutamate.[2]

There was no evidence of any peripheral site of action. In the isolated limb the perfusion of mebutamate directly into the arterial blood supply to the limb failed to affect the blood flow. There was no ganglionic blockade. There was no evidence of adrenergic blockade since there was no reduction of the pressor effect of epinephrine and no epinephrine reversal. Finally, the failure to block the blood pressure depressor response to acetylcholine indicated the absence of any atropine-like action.[2]

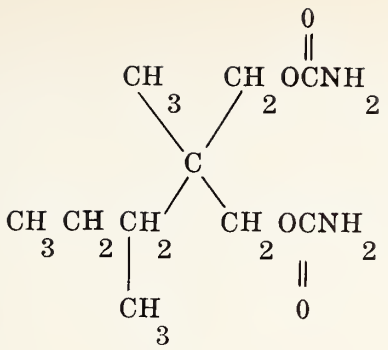
Toxicity

In animal experiments it has been found that the oral LD 50 for mice is 550 mgs./K. (The LD 50 for barbiturates is about one fifth of this amount.) A deliberately fatal overdose of mebutamate caused a gradually increasing respiratory depression.[2] Aside from death due to overdosage, the only toxic effects observed were due to central nervous system malfunction; for example, the uncoordinated and unsteady gait of dogs given large doses of either mebutamate or meprobamate. None of the six dogs, all of whom were given mebutamate for six months, showed any abnormality at autopsy.[3]

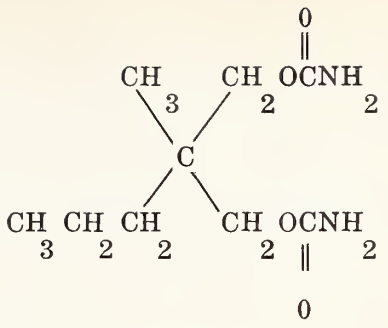
Twenty-eight normal adult volunteers were given mebutamate, 300 mgs. four times daily, for 56 days. None showed any significant change in complete blood count, blood urea nitrogen, electrolytes, liver function studies or urinalysis. The average white blood count did drop from 9,093 to 7,633, but with no count below 5,300.[2] Two of our patients who were taking the ordinary antihypertensive dose of 300 mgs. four times daily did report an inability to control their gait, staggering as though they were drunk.

* This study was supported by a grant from Wallace Laboratories.

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Mebutamate
(a propanediol dicarbamate)



Meprobamate

Experimental Protocol

Fourteen patients were studied by means of a double blind technic. The patients completing the study were by chance all women, and all had mild essential hypertension. One had a grade one and the rest grade two hypertensive eyeground changes by the Keith-Wagner classification. Normal renal function was shown in all but three and the blood urea nitrogen was below 19 mgs. % in all. All patients underwent a study which did not demonstrate any organic cause for their hypertension.

During the placebo period the average blood pressure for each patient ranged from 212/107 to 134/92, the average blood pressure of all the participants completing the study being 176/103 while taking the placebo. The patient with the average pressure of 134/92 was taking chlorothiazide throughout the study period and during the placebo period had an average standing blood pressure of 145/101. The diastolic reading was taken at the fifth phase or the cessation of sound. The age range of the group completing the study was 41 to 70 years with an average age of 54.

No patients were included who, immediately prior to the study, required hydralazine (Apresoline) or more dynamic drugs for control of their hypertension. No patients were taking reserpine, hydralazine or a ganglionic blocking agent during the study period. One person took one or two tablets of phenobarbital a day throughout both study periods. Seven of the 10 who completed the study did, for various reasons, continue to take chlorothiazide or hydrochlorothiazide. The dosage of the thiazides remained constant throughout the entire study period. The dosage of mebutamate was 300 mgs. one-half hour before meals and at bedtime.

The actual testing period was preceded by three to four weeks of placebo therapy to allow the patients to stabilize after stopping previously given antihypertensive agents and to accustom the patients to the new physicians and regimen. This also enabled the investigators to assure themselves that side effects experienced during this time were placebo reactions rather than drug effect.

Following the initial placebo therapy the patients were randomly assigned to either a placebo or to the active drug, which medications were identified by a code number. The identity of the medication was not known by either the investigators or the patients. After obtaining four sets of blood pressure readings the patients were switched from drug to placebo or vice versa and an additional four readings were taken. As the clinic visits were two weeks apart, each patient took the drug for a minimum period of two months with a like period of placebo therapy. Thus the patients acted as their own controls (Table 1).

The blood pressure recordings were taken in the right arm in the sitting position, immediately after standing and again after the patient had been standing for three to five minutes. The sitting and three to five minute standing pressure determinations

Experimental Design

	four weeks	eight weeks	eight weeks
Group I	Placebo	Placebo	Mebutamate
Group II	Placebo	Mebutamate	Placebo

TABLE I

were recorded two or more times until the blood pressure stabilized. Two observers worked with the patients throughout the study, each using one of the two sphygmomanometers assigned to the study.

Results

The only significant differences in blood pressure occurred in systolic pressures obtained in the sitting position after two months of treatment by mebutamate as compared with the sitting blood pressure prior to treatment. There were no differences in the diastolic pressures. There was no postural hypotension, and there were no differences in blood pressures taken while the patients were standing. Probability values were calculated according to a method of analyzing pairs of samples. The method utilized the T table and distribution (Tables 2, 3).

Average Blood Pressure of Each Patient

Patient	Sitting blood pressure	
	Placebo	Mebutamate
*A. M.	157/93	146/96
*W. H.	196/114	190/120
*L. P.	158/96	147/95
L. E.	212/107	193/108
M. S.	140/92	138/90
C. C.	211/108	199/114
A. H.	165/110	149/100
H. T.	173/89	167/86
Z. T.	167/93	158/92
I. K.	180/116	169/127

* Patients not taking a thiazide

TABLE II

Eight of the 14 originally included in the study experienced side effects. Three patients had severe reactions, two a staggering gait and one a severe weakness. Two of these patients refused to continue with

Statistical Analysis of the Differences in Average Blood Pressure

All Patients	Placebo	Mebutamate	Systolic Pressure T Value	Probability
First sitting B. P.	176/103	169/103	4.35	$p<0.01$
Last sitting B. P.	173/101	164/103	3.13	$p<0.05$
First standing B. P.	173/107	167/109	1.85	not significant
B. P. after standing 3 to 5 minutes	176/110	170/108	0.39	not significant
Patients who also took a thiazide				
First sitting B. P.	178/102	169/102	5.42	$p<0.01$
Last sitting B. P.	173/102	168/102	2.56	$p<0.05$

TABLE III

the study. Five more had moderate to minimal complaints of sleepiness, tiredness or dizziness. In two of these the complaints disappeared while on the same dose, while in the other three it was necessary to reduce the dose by one-half. Because of the side effects, four patients in the study were receiving a lower dose than recommended.

Comments

For many persons mebutamate is a sedative. In three studies involving 123 patients, over half mentioned drowsiness as a side effect.[3] Dr. Moyer and his associates, in comparing mebutamate to placebo, found that 11 of 12 patients slept better and longer when taking a large dose of mebutamate before retiring.[4]

At this point it is pertinent to ask whether there is any need for a mild antihypertensive agent? To answer this question it would be helpful to look at some of the evidence indicating the desirability of treating small to moderate elevations of blood pressure. A number of authors have questioned the necessity or even the desirability of treating "benign essential hypertension."[5, 6, 7] They have shown that benign hypertension does not dramatically affect the mortality rate. Unfortunately these authors do not answer the question of the long-term prognosis or the eventual life expectancy of the mild hypertensives.

The only study which attempts to answer this question is an excellent study of 100 benign hypertensives who had survived their hypertension for at least eight years before the beginning of the study.[8] The follow-up period was 18 to 34 years. The blood pressure readings were greater than 180 systolic or 100 diastolic at the initial visit. The 32 patients who were 50 years or younger when they first developed high blood pressure survived on the average 7.6 years less than expected. However the 68 patients over 50 survived an average of 1.2 years longer than their predicted life expectancy.[8]

Looking at the problem in a somewhat different manner, we can quote the life insurance statistics of several million persons to produce convincing evidence of mild impairment of survival with even modest elevations in blood pressure. For example, men aged 30 to 39 years with blood pressures in the range of 148 to 157 systolic over 98 to 102 diastolic incur a mortality rate 4.98 times that of all persons of the same age who were insured as standard risks. Conversely, a lower than average blood pressure carries a lower than average mortality rate.[9] These life insurance figures do not prove that all persons with mild elevations of blood pressure should be treated, but merely point to the fact that higher than normal pressures are associated with higher mortality rates.

Need for Mild Antihypertensive Drug

Each doctor will have to make his own decision as to whether or not to treat a patient with mild hypertension. He will balance the evidence indicating an increase in mortality (which is of rather uncertain magnitude) against the psychological implications of long continued treatment for hypertension, the side effects of presently available drugs and the cost to the patient. There is at least suggestive evidence to support the theory that lowering the blood pressure in benign essential hypertension improves life expectancy.

The recent tide of drugs have been primarily for use in patients with moderate to severe hypertension. There is a need for another effective mild antihypertensive drug if it will produce an additional drop in blood pressure when added to other therapy and if it does not have significant side effects. Aside from the question of its effectiveness, mebutamate is tolerated better than reserpine. Reserpine is "blessed" with an unusual number of annoying to serious side effects, among which are stuffy nose, a flu-like syndrome, lethargy, nightmares, depression, suicide, sexual impotence and an increased incidence of peptic ulcers. Reserpine, when combined with digitalis, intensifies the bradycardic effect of digitalis and increases the frequency of extrasystoles. Insomnia which is often a problem for hypertensives tends to be accentuated by reserpine, but relieved by mebutamate.

It is believed that the site of action of mebutamate is in the central nervous sys-

tem in or near the hypothalamus. Evidence to support this was presented previously. To determine whether there is any reason for thinking that mebutamate should be effective when used in combination with other mild antihypertensive agents we should briefly review the mechanisms of action of chlorothiazide and reserpine. Dustan et al. studied chlorothiazide in a short-term experiment and concluded that its effectiveness in lowering the blood pressure was due to its ability to decrease the plasma volume. The oligemia produced by chlorothiazide was accompanied by an increased peripheral resistance in eight of nine of their patients. This increase in the vasomotor tone tended to maintain the blood pressure at hypertensive levels. There was no other more direct mechanism for lowering the blood pressure.[10] But recently, Conway and Lauwers, in a study of the long-term effects of chlorothiazide, have shown that the peripheral resistance falls by about 24%. The only other long-term effect that these investigators were able to demonstrate with any consistency was a loss of body water, presumably from the intracellular compartment.[11]

Reserpine directly affects the vessels. There is a depletion of the catechol amine content not only of the arterial wall, but also of the heart, adrenal medulla and sympathetics.[12] In the brain reserpine has a generalized depressant effect on the vasomotor mechanisms, both pressor and depressor, as is shown by the lessened response of the medullary and hypothalamic vasomotor areas to artificial electrical stimulation.[13]

Both chlorothiazide and mebutamate decrease peripheral resistance but by different mechanisms; thus their effects may well be additive. Reserpine would perhaps be expected to be more effective than mebutamate as it acts both centrally and peripherally, but its side effects are legion. One would not expect mebutamate to give any additional vasodilation when given in combination with ganglionic blocking agents or with reserpine.

Summary

According to the available evidence, the hypotensive action of mebutamate is due to its effect on the vasomotor centers in the medulla and hypothalamus. This drug is also an effective sedative in a slightly higher dosage than was used in this study, and is a good nighttime hypnotic agent. Its major side effects, as an antihypertensive drug, are drowsiness and, occasionally, incoordination.

Drowsiness occurs in over half of the patients and will sometimes disappear after a few days or weeks without changing the dosage. There are no other known major side effects. Our study, even though it was conducted on a small group of patients and showed a rather small decrease in blood pressure, did produce statistically significant evidence that mebutamate lowered the systolic blood pressure in benign essential hypertensives who were taking thiazides.

Acknowledgment

We wish to acknowledge the assistance of Robert Gregory, M.D., in carrying out this study.

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From *the Journal* Fifty Years Ago

. . . The improvement in x-ray apparatus enables us to take almost instantaneous exposures, making, for instance, a stomach skiagram in from one-tenth to one-fifth of a second, which gives an impression on the photographic plate unaffected by peristaltic action. This is most essential.

The technic of the bismuth meal is as follows: The patients are given a brisk purge the day before and placed on a liquid diet. The following morning they are instructed to take two ounces of bismuth subcarbonate in milk or cereal. They come to the x-ray laboratory six hours later without taking any food in the meantime. The first skiagram is now taken. The normal stomach should show no bismuth residue after six hours. If there is a residue we note its amount, its position and its shape, and draw our conclusions. We thus determine the motor activity of the stomach more accurately than by any other method. We determine the function of the pylorus, whether obstruction or spasm is present, and the compensation of the gastric muscles. We also follow the bismuth that has passed out of the stomach to determine the functional activity of the small bowel.

After the first skiagram we immediately give a second bismuth meal consisting of two ounces of bismuth in 300 to 400 c.c. of buttermilk. We then, through a period of several hours, take a series of from six to 18 plates, depending on conditions found in the first few plates. From this series of plates we determine the size, shape and position of the stomach —whether dilated or contracted, whether a normal "fish-hook" or "cow-horn" stomach, or whether atonic and dropped into the pelvic cavity. We also look very carefully for "filling defects," so called, that show as indentations in the stomach's shadow caused by tumor contractions, or we look for "hour glass" appearance, usually caused by ulcer or cancer, or we note any persistent lineal indentations running into the stomach shadow from the greater or lesser curvatures which very often means ulcer on the opposite side. We note the pyloric shadow and the "pyloric cap," which, when distorted, or absent, may point to duodenal ulcer or adhesions to the liver or gallbladder. We watch the stomach peristalsis through the fluorescent screen, which will often give important information which the plates may not show. If warranted by the history of the case we then follow our bismuth down through the small and large bowel, or fill the colon by our bismuth enema and by additional plates and fluoroscopic study determine as to kinks, tumors, adhesions or other obstructions.—Albert M. Cole, M.D., "The X-ray Diagnosis of Gastro-intestinal Disease," *JISMA*, July, 1913.

This is a revised version of a speech given at the state chapter meeting of the American College of Surgeons, Indiana section, May, 1951, in Indianapolis.

Evaluation of Head Injury Patients— Analysis of Crash Injuries

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"THE NEUROSURGEON is concerned with traffic accidents because from 30-70% of the fatalities are attributed to head or spinal injuries." Protection of the head and neck is therefore important in prevention of injuries; but promptness and care are also necessary in giving first aid and in transporting the injured. There is evidence that morphine has been misused at the scene of the accident and that subsequent diagnoses are too often mistaken.

The epidemiology of accidents needs continued study so that death traps can be eliminated and environmental sources of confusion can be recognized. Some patients have been the victims, not so much of accidents, as of wilful manslaughter. Psychiatric and neurological tests for drivers might be revealing. There *must* be enough genius in the medical, legal and engineering professions to control this nationwide disease. Heart disease and cancer lead in all causes of death, with traffic accidents ranking third; yet in young people who are physically fit before the accident, with years of life ahead, traffic accidents are the greatest and the most serious of these three great killers.

Emergency management of the head and spine resolves itself into three principal phases; first, at the scene of the accident; second, transportation from the accident; and third, in the hospital, where definitive emergency treatment can be administered. There is no question that the care of the patient at the scene of the accident is often beyond the control of the physician. On the other hand, by proper indoctrination of ambulance crews and people in general, it is quite possible to prevent them from doing further harm to the injured patient. It should not be forgotten that the unconscious person may have injuries aside from the apparently obvious head injury. In particular, he may have injury to the cervical, thoracic, or lumbar spine or to the chest or abdomen. Past experience appeared to indicate that patients with craniocerebral trauma rarely had other conditions. This is no longer true. Present day high-speed automobile accidents are productive of multiple injuries.

As to transportation, no one should be moved until adequate facilities are at hand to transport him. He should then be rolled upon the litter at ground level, utilizing sufficient manpower so that there will be no relative change of position of any part of the body. The unconscious patient should be in the best possible position for a good exchange of air (with no obstruction). If there is any question as to injury to the spine or neck, this should be kept in mind in transporting him. Obviously, if there are external wounds with excessive blood loss, they must be dealt with immediately at the scene of the accident, insofar as possible. This is especially true of extensive lacerations of the scalp. Firmly applied

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pressure dressings will control these in almost every instance.

Maintenance of Adequate Airway Imperative

Upon arrival at the hospital, a careful appraisal should be carried out. The first considerations are to determine whether the patient is in shock, whether he has an adequate airway, and whether there is any evidence of external bleeding. Maintenance of an adequate airway cannot be overemphasized. The patient with a head injury or a spinal injury is in a particularly vulnerable situation with regard to aeration of the lungs. If his injury is cerebral and even moderately severe, he will be unable to cough or swallow. If, in addition to or aside from this, he has a high spinal injury, he will be unable to breathe deeply or cough effectively.

As a consequence, secretions accumulate rapidly in the nasopharynx, trachea and lungs and prevent adequate oxygenation of the blood. Because of this, cerebral hypoxia (anoxia) develops, which increases the effect of the primary injury. In addition, breathing against obstruction results in increased venous pressure in the superior vena cava, jugular veins and intracranial venous sinuses as well as in the tributary veins, with the result that the blood flow through the brain is slowed, thus resulting in further impairment of oxygenation and increased insult to the intracranial nervous centers. It follows that whatever will improve circulation and oxygenation will tend to reduce the harmful results of the injury. Perhaps an airway or a change of position or holding the tongue out will suffice sometimes, but tracheotomy has become a lifesaving measure and is being used early more and more instead of as a "last resort."

In those instances in which the patients arrive with adequate aeration, or in patients in whom the emergency treatment has secured an adequate airway, the most pressing problem is to determine whether the patient is in shock as shown by the usual indications, namely, rapid pulse and cold, clammy skin. In the absence of obvious external bleeding, the most common causes of shock should be looked for, i.e., retroperitoneal hemorrhage, intraperitoneal bleeding as a result of liver or spleen injury, intrathoracic bleeding, traumatic pneumothorax and, remotely, shock due to overwhelming brain stem injury. It must be borne in mind that, because of the unconscious state of the patient, the usual evidences of intra-abdominal injury will be minimal. One must resort to a careful appraisal of the entire situation. If shock is present, it should be promptly corrected by the administration of such restorations of blood volume as are necessary. In the presence of shock the head injury should be ignored and the patient treated precisely as if he had any other sort of injury with shock.

Close Observation of Vital Signs

Suppose we have a patient brought into the hospital from an accident. We must remember the foregoing first, then make every attempt to obtain a history of the accident. If one is available, so much the better; if not, and the patient is unconscious, then we must use that which we have to the best advantage. Rarely do we have the textbook findings, but rather we have combinations of skull fractures, cerebral concussion, fractures of ribs with emphysema of chest walls, pneumothorax, intra-abdominal injuries, plus fractures of the long bones of the extremities and spinal injuries. As soon as the patient is somewhat stabilized after treatment for shock, then more minute examination must be done.

Just by looking at the patient one can usually tell if he is conscious or unconscious. Then by observation one can usually observe if the patient has carpopedal spasm which would indicate brain stem damage and a bad prognosis. As much examination as possible should be done when the patient is first seen. For example, by just watching the patient while he is being undressed, one will usually be able to tell whether he is moving all extremities or not. Then the depth of stupor or coma can be estimated. The evaluation of the "vital signs" should come early. Temperature, pulse, respirations and blood pressure should all be taken frequently, along with careful observation

of the patient. It is not sufficient to think of a patient being conscious or unconscious. One must realize that there are many variations of consciousness, ranging from full alertness through drowsiness, semi-coma, coma, deep coma and finally death. In this connection one cannot overemphasize the contribution that well-trained nurses can play in the care of the neurosurgical patient. Every nurse should watch her unconscious patients from the time she comes on duty until she goes off. If she notes, for example, that, when she comes on duty, a patient objects to painful stimulation and within an hour or two ceases to object, there is cause for her to be concerned and to call the doctor.

Such things as lacerations can be cared for in the admission room, if the patient's condition permits. Ofttimes, when his condition is poor, repair of lacerations must wait until the condition of the patient is improved.

It has probably been noted that up to this point nothing has been said about x-rays. Actually, in the seriously injured patients the roentgenograms may well be postponed until his condition improves. Ofttimes it is obvious that some injury other than craniocerebral is going to take the patient's life. In this case, it (the other injury) should take precedence over the head injury. For example, fracture of multiple ribs with bleeding into the thorax or an enlarging pneumothorax may cause death if not treated, even though the patient has an obvious head injury.

Intracranial Pressure Dangers

After the patient has been studied, the possible complications will have to be considered. I have previously mentioned the vital signs. Respiration, temperature (usually rectal, never axillary), pulse and blood pressure need to be taken every 30 minutes until stabilized, then every hour as long as abnormal. If a patient has brain stem damage, the temperature may go up rapidly and once it is 104-108 rectally, it is much more difficult to bring down. Medications rarely do much good. Mechanical cooling by alcohol or tepid water rubs plus judicious use of ice bags is more effective.

Close observation for signs of intracranial hemorrhage follows. It has long been known that in moderate increase of intracranial pressure, which can be tolerated by the patient, there is slowing of the pulse rate and sometimes of respiratory rate, with perhaps slight rise in temperature and in the systolic blood pressure. As the intracranial pressure rises to the point at which it seriously interferes with intercranial blood flow, the pulse rate begins to rise rapidly; and the systolic pressure goes up. It is during this time that the patient must be observed and the necessary corrective measures applied. Campbell makes the point that "Trephination in the patient who does not harbor a hematoma will do no harm, but failure to carry out the procedure in one who has a clot will make the difference between life and death." In this connection it should be pointed out that halfhearted measures are dangerous; and, may I emphasize that a patient with a head injury who becomes restless should be studied and evaluated as to condition or change of condition before he is given any narcotic or sedative. Seeing such patients once a day leads to high mortality rates. Their condition can change from hour to hour.

How You Can Help

Some statistics in regard to the accident rate in Indiana as a whole, and for the city of Indianapolis are given in Table I. It is quite obvious that the death rate in the state is averaging about the same as it has for the past 27 years, but, in the city of Indianapolis, there has been a gradual decline. As you will note, the traffic deaths increased from 32 in the city in 1958 to 60 in the city in 1960. This is explained by the fact that the city limits were extended in all directions.

One might well ask, "How can I help?" My answer would be that each member of the medical profession should take an interest in civic affairs. There are numerous safety committees on the state level and in Marion county and Indianapolis. For the past 15 years I have been a member of the

Traffic Deaths 1935 To Date*

YEAR	INDIANA	INDIANAPOLIS
1935	1193	121
1936	1305 (Average 1288)	114 (Average 110)
1937	1367	95
1938	1099	74
1939	1029	51
1940	1217	82
1941	1478	65 (Average 72)
1942	1016	85
1943	717	56
1944	784	72
1945	860	69
1946	995	60
1947	1116	66
1948	1071	64
1949	1121	50 (Average 62.7)
1950	1124	59
1951	1247	66
1952	1277	61
1953	1276	60
1954	1080	49
1955	1149 (Average 1150)	45 (Average 47.3)
1956	1222	48
1957	1161	37
1958	1056	32
1959	1125	51
1960	1124	60
1961	1081	62
1962	1226	48

* Chamber of Commerce, Indianapolis statistics.

TABLE I

Safety Traffic Committee, sponsored by the Indianapolis Chamber of Commerce. This committee was organized in 1941 and took a few years to learn how it could best function. Now it applies moral pressure on the judges handling traffic cases. It keeps an eye on the traffic police and those in charge of this type police officer. Also, its influence is exerted to some extent in watching the prosecutor's office. Gradually, this moral suasion has begun to reap some results. Credit must go to all the safety committees, but I know the workings of only this one. It is my hope that more surgeons will become interested in seeing that there is a safety committee in each and every county of the state. Whether it is sponsored by the chamber of commerce or its equivalent in each county matters very little; but those civic leaders can easily see that a problem exists, by reading the daily paper or by listening to the radio where practically every half hour there is some plea for traffic safety, one can see that all should become interested in this problem.

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The Case of the Polluted Professor

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BY DEFINITION, pollution implies contamination, taint, lack of cleanliness and infection. Usually, physical befoulment is meant, though the more priggish mentors conjure up deviant aberrations and libidinous libations to Lesbos. Sewage pollutes our waterways and radioactive fallout pollutes the atmosphere.

The antonym, or opposite of defilement, is purity in all its derivations including the puritanical. We will not discourse on the mind polluting effects of present-day movies and TV programs. We will not enter into polemics anent the need to combat, relentlessly, the *polluting* propaganda being disseminated by our foul foes—our wicked enemies contaminate the airways. It is our sacred duty to *purify* this medium by presenting our own noble ideals.

In retrospect, the case of, let us call him Jack Jones, is a most impressive reminder of how often we look without really seeing. Pre-conditioning can make the most absurdly simple appear different—bewildered bafflement blurs our blinded binoculars. Of course, that is why diagnosis is still an ART; the computer cannot remove the thrill of the sudden revelation of truth: the sparkling diamond previously concealed in the rubble.

That particular day had started most horribly before dawn and had become progressively worse. I was jerked out of bed by a phone call to attend a dear colleague of mine who had suffered one of those rapidly fatal cerebral hemorrhages. While at this hospital, I made rounds and had the duty of seeing several other hopeless cases. At two other hospitals I had similar frustrations; in one case, a good friend of my family had to be told that his only grandson had an especially malignant form of leukemia. I was late arriving at the office, behind schedule when I started and hopelessly ever more behind as the afternoon became evening. By that weary time, I was at my grouchiest, most evil-tempered, barely-contained worst.

As the final patient's chart was being placed on my desk, my tactful and sympathetic nurse said, almost under her breath, "I think you'll get some comic relief from this chap! He has been chatting for the last half hour with that Asiatic resident you

have been expecting; *he* looks first class. Would you want to see him in the second room before examining this Boston freak?"

This Florence Nightingale of mine knew how to whet my curiosity, soothe my ruffled feathers and keep things going—all at the same time and without any seeming effort.

A Diminutive Docent

Subduing my desire to sneak out on some pretext or another, I sighed my consent. While waiting for the gentleman to be escorted in, I cursorily scanned the notations made by the receptionist, "Research associate in Oriental languages . . . age, 22 . . . single . . . etc." I was startled to see the weight recorded at 80 lbs.; the height, 4 feet, 4 inches!

I looked up as the patient made his heralded entrance. Not exactly a Tom Thumb but a most dubitable specimen of adulthood. The extremely well tailored, conservative, age-bestowing habiliments could not conceal this obviously pre-pubertal lad; the boyish squeak of his soprano matched his downy cheeks, innocent of hair and untouched by razor. The unruly mop of hair just would not stay down; the malocclusion, lined up with his rather protruding ears, did much to neutralize the impeccable decor of his attire ranging from the well scrubbed, manicured fingernails down to the gloss of perfectly shined shoes. The bushy eyebrows only accentuated the horizontal, making him seem even shorter than his actual, Lilliputian dimensions. The keen eyes bespoke a sharp intelligence but the almost bloodless sclerae, offset by the severe yellowish pallor of the cheeks, confirmed the impression of some profound, long-standing anemia. This just could not be a genetic or hormonal freak—there had to be better, equally specific reasons.

The youngster and I shook hands. Seating himself, he extracted a huge folder from the briefcase under his arm. From it, he produced a mammoth sheaf of x-rays and a bulky covering letter: it was a veritable tome! Seeing my disconcerted look, the patient got off a feeble witticism; nevertheless, it was his story and I was stuck with it. Resignedly, I started leafing through the detailed summation made by the Beacon Hill medical luminary; I checked with the common and esoteric laboratory tests appended to the chart; a few of the important x-rays were placed in the view boxes for later perusal.

No doubt about it! The professor of medicine had been really more than thorough; all the finest shadings of the repeatedly confirmed findings were arrayed meticulously; the learned consultant marshaled his logical analyses and then hurled them at the reader. There was the hyperchromic anemia: very severe and resistant to all standard therapy; it was not pernicious as there was gastric acidity. The



". . . the height, 4 feet, 4 inches!"

small bowel syndrome was excluded by accepted, well-known tests. Quantitative chemical analyses of the stools were within normal limits, the triolein absorption was satisfactory, labeled I^{-131} worked well, D-xylose went out via the bladder as expected and radiocobalt B_{12} was well taken up by the body. Neither a small bowel biopsy nor a microscopic stool report had been undertaken.

A Scoleciphobiac Scholar

The patient had an excellent appetite and ate well in spite of his stubborn, continuous, abdominal discomfort. There did not appear to be any localization of these pains; the liver, kidneys and spleen had never been palpated. All possible types of x-ray studies of all conceivable regions were demonstrably normal although some small bowel studies had raised a vague question of "possible polyposis." A differential diagnosis of macrocytic anemias was gone into: not only pernicious anemia, but also liver disease, nutritional anemia, hypothyroidism, renal disease, lymphoma; collagen diseases such as lupus erythematosus, metastatic carcinoma, pancreatitis and sprue were excluded for cogent reasons elegantly advanced. The youth was bright with an above average I.Q. and a splendid scholastic record.

Then—why this astonishing stunting of his growth? He could not be another Toulouse-Lautrec; the achondroplastic angle was ruled out absolutely by irrefutable logic. Well, then! Why did Jack Jones fail to grow and mature? Why "epiphyseal bone age: 12?"

Having thumbed my way this far, I turned to the patient sitting there—patiently, even if he did seem to squirm a bit on the chair every so often. "Mr. Jones, did you ever have any pets, like a cat or a dog?"

"Oh, yes; as a small boy, I'm reminded that I had a puppy. They found some roundworms in it and I had gotten some because I had been kissing this dog. I don't really remember but the puppy was given away and I was de-wormed; my mother says they pulled one out of me a foot long! Ugh, it must have been dreadful!" The Orientalist gave a dainty gesture of distaste.

Well! This additional history was not in the protocol—and extracted painlessly. "Mr. Jones! Did they make analyses of your, ah, stool lately?"

"Oh, I'm told they checked me for that years and years on end; I was purged clean and they found not a one afterwards. And, just this spring, they did a proctoscopy—had to put me to sleep for it—I'm very sensitive down there." Rather primly, he indicated the region between the gluteal folds.

Abandoning this intriguing line of questioning, at least temporarily, I requested Mr. Jones to enter the examining room cubicle where he would be given the opportunity to furnish the usual blood and urine specimens and undress for the standard physical examination.

East and West—The Twain Shall Meet

With hardly a perceptible time break, it was the turn of my long awaited Siam resident. The elite of the top echelons in any group of whatever race, creed or nationality have about them that almost austere aura of authority; it is automatic and absolute; it is the exact opposite of the nouveau riche, the parvenu "johnny come lately." The upper crust Brahmins of Hinduism and the upper crust of the Buddhists who truly exemplify the Dhamma/Dharma, Buddhist principles, have a subtle brand of this abundant assurance: somehow, it is softened with gracious humility. The absence of arrogance conciliates, as anyone seeing Pandit Nehru or U Thant on the TV screen will understand. My young colleague was of this breed. I arose and we shook hands; he accepted quietly my extended hand even as he held out in the other his card which read:

CHALOEM VARAVITHYA
75 Bhudhaosod Lane — Bangkok, Thailand

With a charming and most gracious smile, even as I was fumbling with the attempted pronunciation of his name, he said —in excellent Oxonian English, "Just call me Dr. V.; it is much shorter and I'll respond."

The melodious, impeccable, upper-class British accent went well with the ready hand clasp possessed of just the correct

firmness. He was extremely handsome, slight but athletically sinewy, totally alert and intensely intelligent, captivatingly pleasant—an altogether charming find. I did not have to take another look at his folder to know unerringly that here was a prize catch for my small institution.

As we were exchanging the opening gambits of small talk, he nodded towards the examining room area, "I did not expect to see hookworm cases in New York offices; in my country, it is a BIG problem."

Rather startled, I scrutinized Dr. V. with rapidly rising, ever greater respect, "I know that you have been talking with him out in the waiting room; still, he does not know it himself, I've had some flickering thoughts on the subject but the eminent Bostonian consultants have given this diagnosis no consideration at all. What makes you so off-hand certain?"

"Well, Dr. Lieberman! This budding professor is very self-conscious on the topic of his failure to develop; we can sympathize with his plight. Now—with the heathen Chinee," Dr. V. pointed, self-deprecatingly, a graceful finger at himself, "The Boston—ah—Brahmin could be at ease; I extracted an excellent anamnesis quickly. Now, he does not LOOK malarial; as you must know, that is the number one killer along the banks of the Mekong, Pak Sak and all our other life- and death-giving rivers. Now what else will drain dry the young, suck the life sap from them, prevent them from maturing and growing up? Of course, it has to be *worms*—roundworms, tapeworms, flatworms—you name the phylum and the class and there are hundreds of millions of people in this world who harbor them. Still you Americans"—with an eloquent gesture of the hands and shoulders—"are *so* sanitary in your plumbing arrangements that it IS instructive to me that I should see so conspicuous a case on my very first visit to a New York doctor's office.

A Mysophobiac Midget

"Another thing! Did you observe the absolute clincher? Did you notice how he sort of squirmed constantly on his, ah, backside? Well, he was scratching the anal orifice without using his hands—in your country that is considered vulgar. I asked Mr. Jones whether he had itching hemorrhoids; he blushed at the interrogation but conceded immediately that, while he had no piles, his outside always felt irritated no matter how often he bathed and powdered himself; he was frightfully embarrassed at the horrifying knowledge that his pelvic gyrations were so devoid of circumspection."

"But, Dr. V.! Did not Mr. Jones tell you that he had been dewormed as an infant and that he had had a proctoscopy this very spring? Also, they did biochemical analyses of his stools. One would think that parasites, no matter which breed, would have been spotted."

"Did Mr. Jones tell you that he admits to mania on the subject of personal cleanliness? Always, he is washing and bathing; something like that famous little gangster you have—what is his name? Oh, yes, Mickey Cohen. Mr. Jones thinks it is positively indecent—almost lewd—to look in the bowl after having had a passage. How would he know if he was passing worms? As to the proctoscopy! Mr. Jones told me that he took a strong physic the night before and TWO enemas at home just before going to the proctologist's office. Now our patient is very small and has a very tight anal sphincter; he needed some general anesthesia before the 'scope could be passed. I'm sure that the specialist was looking for ulcers, polyps, T.B. and other such things. The physic and the two enemas must have washed all the worms, along with everything else, out of the last foot of his bowel."

"Well, and how about the stool analyses?"

Once again, that silent, disarmingly graceful shrug of the arms, "Did you expect the biochemist analyzing for proteins, fats, carbohydrates and minerals to look under the microscope for anything *living?*"

Just then, the nurse entered to inform us that the patient was ready; as a matter of course, I asked Dr. V. to accompany me. The overall physical scrutiny confirmed only the obvious fact of the miniaturization of our future professor. My x-rays tallied with those from Boston, epiphyseal bone age: 12.

Mr. Jones hesitated somewhat about

dropping his briefs but—he did and leaned over in the classic posture made famous by legions of army recruits. The anal orifice was all but spastically tight. The gloved finger would not enter but a cotton swab did slip by and well inside; after a brisk whirl, I pulled the stick out; the adhering material was whisked onto a glass slide and encased by a glass cover slip. While Mr. Jones was getting dressed, Dr. V. and I peered at the still warm material using the low power of the microscope.

Almost the first thing to be seen was the proglottid of a worm*. . . . While I was fumbling for the name of the species, Dr. V. piped up unhesitatingly, "*THIS* comes from Diphyllobothrium latum—notice that the segment is broader than it is long; the fish tapeworm proglottid is much shorter than the pork and beef varieties. But—I am surprised! Tapeworms will give the terrific anemia, gnawing hunger and flatulence to say nothing of the abdominal pains but—NEVER that anal itching. We must find the hookworm ova."

Nemesis for the Nematodes

Dr. V. was not presuming, hectoring or gloating; he was speaking with professional matter-of-factness. In years, his career had just commenced, but in *this* field he was speaking from very considerable experience. With admirable dexterity, Dr. V. shifted from field to low power field; the rhabditiform larvae eluded him but within a minute or two he did come across a cluster of several Necator eggs! His manner was thoroughly business-like; he had the happy knack of striking just the right note —I *liked* my Thai friend more and more with each passing minute.

Mr. Jones was led back to the consultation room; the facts of the case were laid on the line. At first, he bridled at the very hint of such abominable filth polluting clean

* The subject of SYMBIOSIS has two broad subdivisions: 1) *Commensalism*, a situation in which two closely associated organisms coexist without injury to either and, at times, with actual benefit to one or the other or both; 2) *Parasitism*, a set of circumstances in which the relation is beneficial to the parasite, a creature living upon or within its host to the latter's detriment.

When two totally different plants such as an alga and a fungus commingle to create an entirely new entity, the lichen, we have an ideal illustration of commensalism. In a very real sense, the 300×10^{12} cells that go up into making you and me are an immensely complex, perfectly balanced aggregate of *commensalist* units. In oncogenesis, the deviant cells parasitize the organism as a whole; as metastases spread the cancer, the host is unable to survive.

In infections, we can study the entire gamut, from *commensalist* enteric bacteria busy making vitamins for the host, all the way to the deadly, invariably fatal, rabies virus that slays its host within a week after its *parasitic* and paralyzing entrance into its human victim.

This exercise in stochastic hermeneutics, conjectural exegesis, brings us squarely to the parasites of relevance to us here: the WORMS. While Karl Linnaeus used this all inclusive term to embrace the majority of invertebrates, even the present-day taxonomist gives only sub-phylum three of phylum twenty-three to ALL the craniata or vertebrata (of which class five comprises the mammals) while he reserves the majority of all the other phyla to the colossal roll call — yes, you guessed it — the WORMS.

The Platyhelminthes, i.e., flatworms without an anus, include the flukes (trematodes) and the tapeworms (cestodes). The most common of the tapeworms are: 1) the pork variety, Taenia solium, called *armed* because of the double row of hooklets in the head; 2) the beef type, Taenia saginata, very common in North America and called *unarmed* because the head has no hooklets but only sucking discs; 3) the fish infestor, Diphyllobothrium latum; this is the longest and largest of the three, its head has two lateral grooves and no hooklets.

Most zoologists grant the universally occurring Nematodes, unsegmented roundworms, a phylum all to themselves. We will merely mention plant parasites, pinworms, guinea worms—worms causing filariasis, Ascaris lumbricoides and—of immediate interest to us—*hookworms;* principally, Ancylostoma duodenale and Necator americanus. It is these that cause the severe anemias, pubertal postponement, growth stunting, appetite perversions and other well recognized signs and symptoms. Over the centuries, we have heard of "miners' disease" (also masquerading as brickworkers' disease, tunnel workers' itch, slave dropsy or other descriptive terms).

The cylindrical nematode is less than an inch in length; the bite of the sharp, *hook*-shaped teeth causes direct, copious, mucosal bleeding: not only is there infection at the site of the lesions so produced, but also there occurs absorption of poisonous products produced by the parasite.



"We must find the hookworm ova."

him. Then, he brightened at the dawning realization that there was so simple an answer to his problem. Especially, was he pleased to know that Dr. V. would have charge of the treatment he would undergo during his proposed hospital stay. I called Dr. V. in and we arranged the precise schedule of the decontamination procedures.

All this took time; it was well past even a late supper hour. Still, I felt definitely cheered up; the dismal day had taken on a rosier hue. My wife had some warmed-over food for Dr. V. and myself; she was amazed at my rebound from the dreary diatribe of earlier events. With our coffee, we drank a toast to the *pending, purifying purge* of the *polluted professor!*

The rest is entirely anti-climactic and needs no recording; any medical text will supply the details of the therapeutic procedures. We did save the stool specimens of Mr. Jones; the pieces of the fish tapeworm were laid out ceremoniously on waxed paper. There was only one scolex (head) but the creature was of champion length; nearly 25 feet long!

The hookworm infestation was rather moderate; within ten days, our budding professor had been restored to a state of pristine purity: DE-wormed and DE-itched!!

Mr. Jones chirped a merry good-bye as he departed for his ivy-clad halls. In the intervening couple of years, I am informed that he has grown more than a foot and gained some 45 pounds in weight. He writes that he is growing a beard and that his voice is a bathroom baritone. So far, he mentions no romantic interests.

I learned much from the pleasant six months Dr. V. spent on our wards. The history, geography and present state of his country no longer seems remote since he explained, ever so patiently, just what Kublai Khan did to the Thais back in the 13th century . . . just who and what were the Khmer people, builders of the palaces of Angkor-Wat whose ruins are so impressive even now . . .

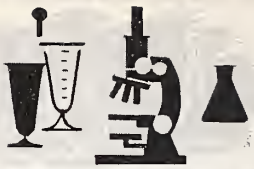
After he left, we exchanged occasional letters; just the other day, he sent me photos of Jack Jones that he had taken while the chap had been at the hospital: standing alone, attired in those nondescript hospital pajamas, and also standing (just for comparison) by the side of a rather short 18-year-old, normally developed patient. I am looking at these pictures now.

In a medical journal I have been reading how—in their illimitable wisdom—the powers that be are making strenuous efforts to restrict drastically the number of foreign residents to be trained in our American hospitals. I just wonder whether it is such a good idea to force them to seek instruction in Moscow? Anyhow, Dr. V. is an instance of a foreigner who gave more than he received.

He looked—and he *SAW*. . . . ◄

1270 Fifth Avenue
New York, New York

Path-finder
PUBLISHED UNDER THE AUSPICES OF THE INDIANA ASSOCIATION OF PATHOLOGISTS



The Waning Influence of the Autopsy

DAVID L. ADLER, M.D.
Columbus

THE MORPHOLOGIC BASIS of anatomic pathology was established in the autopsy room. Pathologists, surgeons, clinicians and others once flocked to the dissecting room to study morbid anatomy and to correlate patients' clinical signs and symptoms with gross lesions observable at death. A great body of literature thus was established and medicine's debt to these early pioneers can never be adequately repaid.

Succeeding years have seen the diminishing importance of the autopsy and the reasons for this may be summarized:

1. Most of what can be known through autopsy methods is already known. It is argued that more sophisticated methods are needed to expand our knowledge of disease.

2. Brief exposure of medical students to autopsy technic is insufficient either to whet their appetites for more or to give them even passing acquaintance with the art.

3. More glamorous aspects of medicine, even for the pathologist, have gradually superseded the time-honored autopsy. It would seem that concern for the living has acquired more importance than concern for what killed him.

4. The new breed of pathologists pride themselves not so much on their fine skill as anatomic pathologists but as clinical pathologists, engaged with the physician in the diagnosis and treatment of the living patient.

5. Insistence by various accrediting agencies on high autopsy rates has resulted in a host of "routine" autopsies, perfunctorily performed by residents or even medical students. The value of this kind of unsupervised autopsy is debatable.

6. Pathologists' work load has increased so much that the added, unexpected, nonscheduled autopsy request is viewed as an intrusion on time that could be better spent on more productive enterprises.

7. Autopsies on patients dying in the hospital ordinarily are done "for free." There is thus no incentive for either hospitals or pathologists to become "evangelical." The pathologist's time is spent, hospital's facilities are used, but no income is produced.

8. Clinicians occasionally think so little of the autopsy that they delegate the task of obtaining consent to the nurse. To compound the felony, the pathologist is then called by the nurse who tells him he is to perform an autopsy. Nothing irritates a pathologist more than this. An autopsy is the supreme and final consultation between the clinician and the pathologist. As such it is incumbent on the former personally to contact the latter. This pre-autopsy consultation gives the pathologist pertinent clinical information, narrows his field of search, enables him to rule suspected lesions "in or out," determines the desirability of examing the brain, etc. The two can discuss the adequacy of the permit, the best time for the autopsy to be done so that the clinician may personally attend and participate either in the performance of the work or the relevant discussion.

I feel proper communication between pathologist and his physician colleagues can do much to dispel the waning influence of the autopsy. If requests for autopsies were limited to those cases that are of unusual interest (even if the diagnosis be known antemortem), to cases where the diagnosis is in dispute, to cases in special research categories, or to cases where illustrative material is desired, the autopsy "picture" in this country would improve.

If physicians would actively interest themselves in the mechanics of the autopsy by personally communicating with the pathologist, by attending the performance of the examination and by dropping by when the microscopic slides have been prepared, the value of the autopsy both to pathologist and physician would be enhanced. ◄

Bartholomew County Hospital
Columbus, Indiana

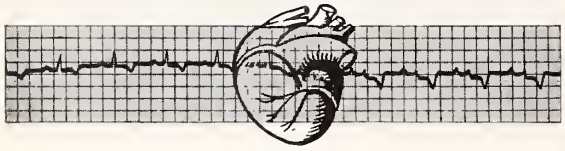
Pharmaceutical Confusion In Soviet Russia

Information about new drugs is given irregularly so that practicing physicians do not know about them and are deprived of the possibility of using them. The process of replacing old-fashioned drugs by new and more efficient ones is too slow. It is necessary to point out that as yet physicians and pharmacists are poorly informed about new drugs.

Any information is purely accidental. . . . The pharmacological council has advised the State Publishing House of Medical Literature to publish as soon as possible four publications on new pharmaceutical products. Too much time is wasted in pharmacies on compounding prescriptions, and this is only because the physicians do not know about the precompounded drugs. . . .

Obviously, only very few general practitioners follow the literature in which the new drugs are described. . . . On the other hand, pharmacy employees do not inform physicians about existing drugs. They do not come to the polyclinic and do not promote the new pharmaceuticals.— From the "Medical Worker," USSR Ministry of Health publication in *Canad. Med. Assn. J.*, Feb. 9, 1963.

Electrocardiogram of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Krannert Heart Research Institute, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

The Nonspecific Nature of T Wave Changes

CHARLES FISCH, M.D.
Indianapolis

OF ALL THE COMPONENTS of the clinical electrocardiogram, the T wave is most labile. It is affected by changes in the temperature, electrolyte composition, the pH of the blood, administration of drugs and hyperventilation. At the same time, however, it may be the only significant objective evidence of rather severe myocardial disease. The way out of this dilemma is to consider the electrocardiogram a laboratory tool and to evaluate it in light of all the available clinical information. The present report serves two purposes. First, to describe a typical example of T wave alterations in an individual with a normal heart and second, to describe simple office procedures that may help to unmask the functional character of the changes of the T wave.

The patient in question was a 22-year-old psychology student who was seen because of fleeting chest pains. Careful examination failed to disclose any cardiovascular abnormalities. A routine tracing was taken on 2-8-63 and showed some elevation of ST segments in V4, V5 and V6. Although this is frequently a normal variant, and the patient was asymptomatic a repeat tracing was taken on 2-9-63.

Surprisingly enough, significant inversion of T waves was present in leads I, II, V4, V5 and V6. It was then decided to investigate the genesis of the T wave change. On 2-11-63 (third row) the tracing was identical to one obtained on 2-8-63 with reappearance of the minimal elevation of ST segment (control). After administration of 100 grams of glucose by mouth, the T wave became negative and similar to that recorded on 2-9-63. On 2-15-63 (bottom row) the control tracing (V4) revealed an inverted T wave which became upright after oral administration of 45 mEq of potassium.

The ability of glucose and potassium to reverse the polarity of the T wave in this instance attests to the benign nature of the inversion of the T waves in our patient. This conclusion is in keeping with the clinical impression, but the unequivocal proof of the benign nature of the EKG abnormality is of considerable significance to the patient.

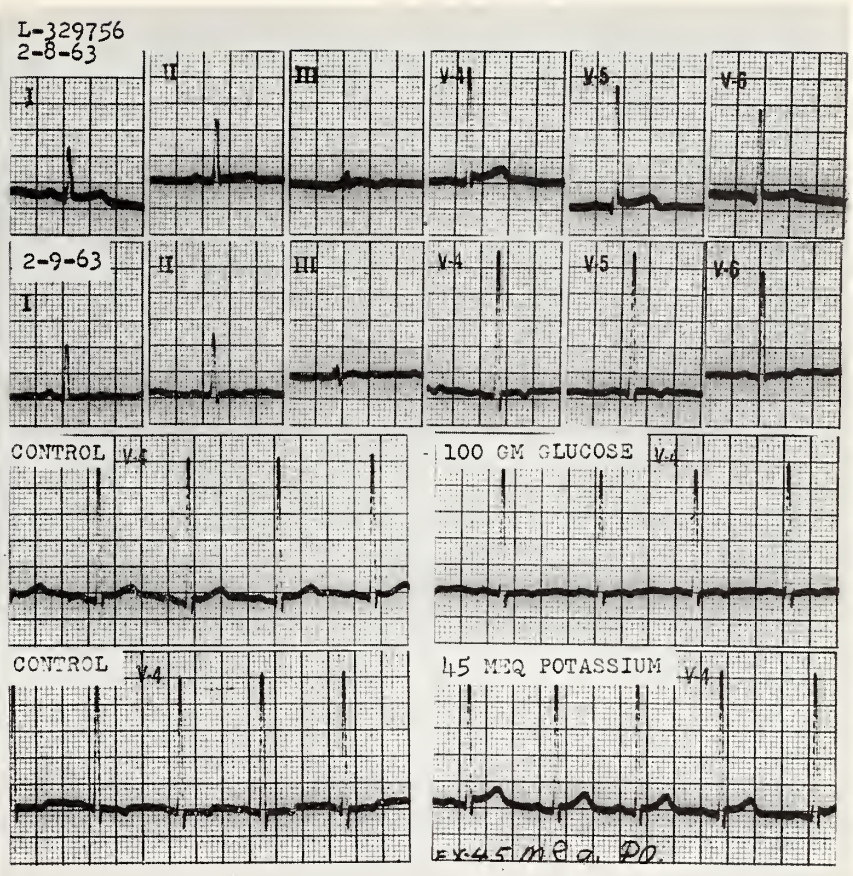


FIGURE 1

UPPER ROW (2-8-63) shows minimal elevation of the ST segments. Second row (2-9-63) exhibits inversion of T waves which became upright after administration of potassium (bottom row) and could also be inverted by ingestion of sugar (third row).

X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

Pseudocysts of the Pancreas

*ERICH K. LANG, M.D.**
WILLIAM M. ANSHUTZ, M.D.†
Indianapolis

A 38-YEAR-OLD white male patient reported with the classical manifestations of a dumping syndrome and an epigastric mass that had developed during the past three months. The patient had been subjected to a partial gastrectomy for a chronic duodenal ulcer some nine months before. A Billroth 2 gastroenteranastomosis was carried out. The operative procedure was unremarkable. The patient was asymptomatic for the first five months, but then developed a progressive dumping syndrome and rapidly enlarging epigastric mass that was palpable transabdominally although partially hidden behind the thoracic cage.

A GI series revealed a mass in the left upper abdominal quadrant resulting in splaying of gastric folds and lateral displacement of the stomach stump. There was no evidence of invasion of the stomach and the mass appeared to be clearly extrinsic to the stomach. A calcific shadow was seen within this mass. The roentgenographic examination suggested the presence of a mass in the tail of the pancreas or the retroperitoneal space. A pseudocyst of the pancreas appeared to be a likely diagnosis in view of the preceding surgical procedure. Re-exploration confirmed the diagnosis of a huge pseudocyst of the tail of the pancreas containing more than 800 ccs. of fluid. A marsupialization procedure was carried out.

The classical anterior and lateral displacement of the stomach by a mass originating from the retroperitoneal space points toward a mass in the tail of the pancreas. The differential diagnosis would include a pseudocyst of the pancreas, a carcinoma of the tail of the pancreas, retroperitoneal lymphomas, adrenal tumors, retroperitoneal sarcomas, and as an outside possibility, huge tumors of the upper pole of the kidney. The loss of definition of the psoas shadow on the roentgenograms can be found with all of these entities.

* Acting Director of Radiology, Methodist Hospital.

† From the Radiology Department, Methodist Hospital.



FIGURE 1

NOTE THE MARKED pressure effect agoinst the lesser curvature side of the stomach with sploying of the mucosol folds around o mass that oppears to indent the stomoch.



FIGURE 2

THE OBLIQUE FILM shows morked onterior displocement of the stomoch stump and demonstrotes the continuity of this moss to the retroperitoneol spoce. Note the calcifications within the moss.

The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

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A Century of Progress

THE CENTENNIAL of the American Veterinary Medical Association will be celebrated by its members this year and by members of the medical profession as well. The two professions, bound together by common aims, have developed to a state of "symbiosis" in this country, with pride in each other's accomplishments and admiration for each other's labors.

Veterinary medicine has contributed immeasurably to the health of domestic animals upon which the sustenance of man and the completion of man's work depends. The conquest of scores of diseases common to man and animals also has been made possible by veterinary science. The inspection and protection of foodstuffs of animal origin, many laboratory procedures and numerous research projects related directly to the health of humans have been the tasks of veterinarians.

Veterinarians from foreign schools began settling in this country in the early 1800's. It was not until 1854 that the first American school was opened in Philadelphia. It was a private school and has since become extinct. Veterinary education paralleled medical education during its early development in regard to the preponderance of proprietary schools and the efforts of the profession to improve its standards. Iowa State College established its veterinary school at Ames in 1879. This is now the oldest veterinary college in the United States.

Today there are 18 veterinary colleges in the United States and two in Canada. The School of Veterinary Medicine at Purdue University was one of the most recently organized schools.

The American Veterinary Medical Association was organized on June 9, 1863, at the Astor House in New York by a group of veterinary surgeons, mostly foreign-educated, who had met to discuss advancement of veterinary science. The association has prospered and grown and today its 17,000 members represent three-fourths of all veterinarians in North America.

In the 1800's the horse was the most important domestic animal and occupied most of the time and attention of the veterinary profession. However, when the horse was replaced by mechanization, the sphere of

veterinary practice expanded. Through research and adaptation, it has developed into a body of knowledge and usefulness many times that of its former self. There are 31 different categories of veterinary medical work now listed by the AVMA.

The medical profession is proud to salute its sister profession and its centennial in the United States, and to exult in its accomplishments towards its double goal—to advance animal health, and to advance human health.

Commission on Drug Safety

MANY AGENCIES have recognized the need for a responsible, representative national committee to consider problems of drug safety. In August, 1962, an action of the Pharmaceutical Manufacturers Association provided the impetus for the establishment of such a body.

The PMA invited Lowell T. Coggeshall, M.D., Vice President of the University of Chicago, to serve as chairman of the commission and to select its members. The commission was formed under a charter "to broaden scientific knowledge on the predictability of action of drugs in humans."

It is a completely independent body that determines its own objectives. The commission is the only continuing authoritative group to which government, industry and universities can turn on matters of drug safety. The commission functions as a recommending and coordinating body rather than an operational one.

The first three meetings of the commission developed comments and recommendations to officers of the Food and Drug Administration and the Department of Health, Education and Welfare on regulations pertaining to new drugs for investigational use. (The regulations were promulgated shortly after the commission was formed.) We believe the scientific community benefited measurably from the commission's work on this problem.

At its fourth meeting on February 16, the commission affirmed its function. It will serve as a catalytic and recommending agency. The commission will be a "clearing house" on drug safety matters. And it will serve as a continuing focal point for counsel with government, industry, universities and scientific societies having responsibilities for drug safety.

The commission is making a special survey of present knowledge of factors involved in infant malformations. Josef Warkany, M.D., Professor of Research Pediatrics, the University of Cincinnati, The Children's Hospital Research Foundation, is chairman of the survey group. It will include noted scientists in the fields of pharmacology, genetics, chemistry, pathology, teratology and other disciplines. This group will develop recommendations for use by the commission in its general report.

The members of the commission are:

Paul R. Cannon, M.D., Editor, Archives of Pathology, American Medical Association; Thomas Francis, Jr., M.D., Chairman of the Department of Epidemiology, The University of Michigan; Philip S. Hench, M.D., Emeritus Professor of Medicine, The University of Minnesota; Hugh H. Hussey, Jr., M.D., Director, Division of Scientific Activities, American Medical Association; Chester S. Keefer, M.D., Director, Boston University - Massachusetts Memorial Hospitals Medical Center; Theodore G. Klumpp, M.D., President and Director, Winthrop Laboratories; John T. Litchfield, M.D., Director of Research, Lederle Laboratories; Maurice R. Nance, M.D., Medical Director, Smith Kline & French Laboratories; Leonard A. Scheele, M.D., Senior Vice President, Warner-Lambert Pharmaceutical Company; Leon H. Schmidt, Ph.D., Director, Christ Hospital Institute of Medical Research, Cincinnati; Austin Smith, M.D., President, Pharmaceutical Manufacturers Association; Thomas B. Turner, M.D., Dean of the School of Medicine, Johns Hopkins University; Josef Warkany, M.D., Professor of Research Pediatrics, The Universersity of Cincinnati, The Children's Hos-

pital Research Foundation; Duke C. Trexler is Executive Director.

Quoted directly from the *Commission on Drug Safety Bulletin*, March, 1963.

Politics

"WE DO NOT SAY that a man who takes no interest in politics minds his own business. We say he has no business here at all." This pithy observation was made by the great Athenian statesman, Pericles, 400 B.C.—and time has lent it great strength. Today, more than ever, this philosophical dart is aimed at the center of the caduceus, for over the years we have developed a singular insularity of view, a sort of professional exemption from such prosaic challenges as politics—and to our detriment. The paradoxical blend of our naivete and sophistication controlled by perhaps too large a measure of restraint has cloaked us with a mist of silence. Now heed the axiom direct from Roman law which states, "He who is silent seems to consent." Anyone, but an intellectual imbecile, will agree that the benefits from this patronizing attitude have been conspicuously absent. Furthermore, most members are fortunately gaited to a substantial income, and consequently, are thought to be too affluent for their own good; which condition almost every politician is trying to remedy in the shortest possible time.

The nascent political power of the profession is slowly becoming manifest through the efforts of the members, both corporately and individually. Through the thinning mist of silence our political personality is slowly attaining definition, like an approaching ship in the diaphanous fog. Of recent date the indefatigable efforts of the auxiliary in communicating with the legislative body bade fair to eclipse any of their previous efforts, and very well gives credence to the old adage, "Never underestimate the power of a woman." Finally, to any member who has the courage, the conspicuous talent and enthusiasm to engage actively as a candidate for public office, we owe our whole-hearted support, both literally and figuratively.

Franklin F. Premuda, M.D., Co-Editor
The Lake County Medical News
April, 1963

The Treatment of the Coronary-dead Versus The Treatment of the Coronary-living

WHEN PREVOST and Battelli introduced the electric shock method for defibrillation of the heart in 1898, the importance of the method was not recognized. When the first human heart was successfully defibrillated in 1947 and again in 1955, the importance of these accomplishments was not recognized. They were applications of the Resuscitation Technic.

At the present time the Resuscitation Technic has widespread application. Nonmedical personnel are applying it with success. In time almost everyone will know how to do it. Emphasis is on the technic. It must be done right—like learning a new dance step. Deeper reference of this technic to medical science has not yet been made. Each reversal is treatment—Treatment of the Coronary-dead. This is medicine's greatest contribution to coronary disease so far in history. The dead are made to live again.

How is this related to the living—Treatment of the Coronary-living? Medical science has the answer for the coronary-living with good hearts. The death factor is mobile. It can be brought on; it can be reversed; its appearance can be delayed or prevented. The first two of these mobilities are verified by vision. The third mobility is denied because continuity of life lacks the signal of death. But the science is there.

The good heart electrocutes itself because

of uneven blood supply to different areas of heart muscle. When oxygenation of heart muscle is uneven then permeability of cell membranes is uneven and an unstable electrical state is produced. A more even blood supply to heart muscle makes the electrical state more stable. This can be accomplished by intercoronary collaterals and these can be produced by surgical operation designed for this purpose. For the heart not severely damaged by disease, these collaterals are life saving.

Claude S. Beck, M.D.
Cleveland 6, Ohio

Hospital Formulary System Approved

AS A RESULT of action by the American Pharmaceutical Association and its affiliate, the American Society of Hospital Pharmacists, and previously taken by the American Hospital Association and the American Medical Association, a five-point statement of operation for the hospital formulary system was jointly announced by the four organizations.

The statement was developed at a meeting of representatives of the four organizations on March 1. It was then submitted to the respective governing boards for approval.

APhA and ASHP approval clears the way for the four organizations to revise the guiding principles on operation of the controversial hospital formulary system. The formulary system is a method by which physicians and pharmacists, working through a Pharmacy and Therapeutics Committee of the medical staff, evaluate and select medications for use in a hospital. The original system raised questions concerning the manner of its operation. The present proposal, it is expected, will overcome these problems.

The five-point statement of operation is:

"To promote the adoption of a formulary system by the hospital medical staff with the understanding that the administration of such a program will:

1. Be initiated and operated within the individual hospital through regulations promulgated by its medical staff;
2. Insure the maintenance of the responsibility and prerogatives of the physician in the exercise of his professional judgment;
3. Provide for final determination by physicians and pharmacists of medications to be included in the formulary;
4. Authorize the physician to prescribe medications not included in the formulary if in his judgment individual patients require special treatment; and
5. Permit the physician, at the time of prescribing medications, to approve or disapprove the dispensing or the administration of medications in accordance with the hospital formulary system."

(News release issued jointly by the American Hospital Association, the American Medical Association, the American Pharmaceutical Association and the American Society of Hospital Pharmacists.)

Publication in book form of the collection of medical "Tales" by Dr. Arnold Lieberman as they have appeared in the JISMA is being considered.

Comments and criticisms are invited in regard to typographical errors and medical inconsistencies, which may have appeared in the original texts.

Address: The Editor, JISMA, 3935 N. Meridian St., Indianapolis, 8.

Editorial Notes . . .

"It is hereby deemed to be a matter of public policy of the state of Indiana that in the interest of public health, every infant between ages of 3 and 6 weeks should be given a urinalysis examination for the detection of the disease phenylketonuria in

order to prevent the mental retardation which results from this disease." The above is quoted from a law passed in 1961 by the Indiana Legislature to highlight the fact that Indiana was the first state to pass legislation in regard to PKU. A survey made recently by Mead Johnson Laboratories showed that two other states now have legislation. Almost all states are supporting educational campaigns, have information centers and 38 of them give dietary aid to those parents who cannot afford the special diet.

Tetracycline, chlortetracycline and oxytetracycline are capable of forming a stable calcium complex in bone-forming tissue. This apparently has no harmful effects, except that use of these drugs during tooth development (last trimester of pregnancy, neonatal period, and early childhood) may cause a permanent discoloration of teeth. The Food and Drug Administration has advised manufacturers to label all preparations of the three drugs with a warning. There is no evidence that the discoloration involves any hazard to health. Demethylchlortetracycline has not been observed to cause the discoloration.

Combined seat belts and shoulder straps afford three times as much protection as a lap belt alone. An authority on the subject, Dr. H. E. Campbell of Denver, writes in the *Rocky Mountain Medical Journal* that the combination is no more difficult to fasten and unfasten than is the simple lap belt and it provides much-needed protection to the head in the event of a front end collision. The shoulder strap operates on an inertia reel which allows normal motions of the shoulders but locks on sudden impact and prevents sudden movement forward.

Dr. Austin Smith, president of the Pharmaceutical Manufacturers Association, observed recently that "some public officials have become more concerned about protecting the people against drugs and physicians than against disease." Speaking to a Connecticut medical society, Dr. Smith urged that government responsibility in medical affairs be broadened in a constructive way, and that functions which could best be performed by private institutions not be interfered with.

A patient in New York state sued the doctor because the doctor's information relative to reactivation of a tubercular condition had made the patient nervous. The trial court found for the doctor and the appeal court upheld the verdict and stated in part: "Had this defendant failed to fully alert plaintiff he could conceivably have been subjected to censure and suit and thus, on plaintiff's reasoning, there is jeopardy both for making the disclosure and for withholding it. Were doctors to be made conscious of the possibility of suit for honestly explaining their diagnosis to patients for purpose of swift cure they would, with so hazardous a cloud over them, tend to avoid doing so. . . . The practice of medicine would then become a secretive practice with doctors uncommunicative to patients, delaying therapy and withholding information for fear that frightened patients might turn upon them. . . though she may have been badly frightened, plaintiff may be alive today because of the very chemotherapy thus administered to her."

New York Medical College—Flower and Fifth Avenue Hospitals have signed a contract with the Drug and Hospital Employees Union which outlaws strikes and sets rates of pay and conditions of employment for 225 of the employees in the institution. The agreement includes some pay raises, and specifies minimum pay scales. Also provided is agreement to compulsory binding arbitration on any future disputes which cannot be settled by the two sides. The union vice-president was quoted as saying "Both the hospital and the union shared an urgent desire to eliminate strikes and other interference with the medical center."

The Pharmaceutical Manufacturers Association, during the past two years on occasions when the official position of the Association was expressed to Congress in regard to legislative control of drugs, has indicated

that, if there had been any deficiency in drug control in the past, the deficiency existed more in the form of insufficient funds for the Food and Drug Administration than in the form of insufficient law and regulations. FDA has had insufficient staff for proper control of prescription drugs. Recently the PMA vigorously supported the increased appropriations proposed for the FDA and pointed out that the new law and its expanded reporting program would require even more in the way of finances.

Thought provoking item from the Rotary Club Bulletin: "There were two rounds of applause at the all-community gathering. One was for the announcement of a federal grant for a local project and the other for a resolution against Government spending!"

"With the emphasis on research today, medical (school) staff members are inclined to neglect their responsibilities in teaching and patient care." Dr. Joseph Hinsey, administrator of Cornell Medical Center, is warning against a swing toward too much research, and advocates a re-establishment of a better balance between teaching, research and patient care in medical school teaching hospitals. Dr. Hinsey thinks we had too little research before World War II and too much now. There are 800 medical faculty openings in the nation's medical schools. Dr. Hinsey says we need more and better teachers or the health care of the country will worsen.

The FDA has proposed a new regulation which will reduce the maximum allowable amount of folic acid in a daily dose of vitamin food supplements from 0.4 milligrams to 0.1 milligrams. The limitation was originally made because larger amounts of folic acid per day might mask pernicious anemia and not be sufficient to cure it, thus making its complications more likely. In the interim it has been determined that the lesser 0.1 milligram amount is nutritionally adequate. The temporary 0.4 milligram limit will remain in effect until final action is taken on the new regulation.

Dr. Austin Smith, in an address at the annual meeting of the American Pharmaceutical Association, said recently that the regulations issued in conformity to new drug amendments passed last year will "slow down drug research." He stated that one drug firm had already dropped 30 drugs, not because there was a question of their safety, but because the firm could not afford to comply with the new regulations. Another firm which was marketing 67 drugs last year, has dropped 13 and expects to drop 37 more before the new regulations go into effect in July. Dr. Smith said he thought that the regulations on research go beyond the intent of Congress.

Plastic molding toys variously called "Flubber," "Roobly Rubber" and "Plubber" are being taken out of distribution. All three are made of partially polymerized synthetic rubber and have been widely reported to cause a skin rash. The Food and Drug Administration recommended the action in accordance with provisions of the Federal Hazardous Substances Labeling Act.

Loma Linda University (formerly College of Medical Evangelists) medical center is going to build a 400-bed hospital at the Loma Linda campus near Los Angeles. The hospital will have a three-story rectangular base with three six-story circular towers arranged in cloverleaf fashion as a superstructure. The first three floors will contain the support facilities and service areas. The towers will contain the nursing units with circles of patients' rooms arranged around central nursing stations. With this arrangement every patient will be within a few feet of the nursing station. ◄

President's Page

"OPERATION HOMETOWN"

On February 21, 1963, a revised King-Anderson Bill—H. R. 3920, Hospital Insurance Act of 1963, was introduced to Congress. The bill is similar to the previous King-Anderson proposal for certain hospitalization benefits to be paid to those over 65 years of age through the Social Security mechanism — the additional funds to be secured through a raise in the tax base and rate. An important addition to the new bill would be to provide equal benefits to the needy aged who are not covered by Social Security through contributions to Social Security funds from government general funds. Introduction of this bill further serves to prove that passage of such legislation continues to be one of the prime goals of the administration.



Again it is our duty, knowing that this represents unsound and faulty legislation, not only to oppose passage of this legislation but to alert and inform the general public of the unsound basis of this bill and to show the inherent dangers in this type of legislation. To this end, a vigorous campaign has been outlined by the American Medical Association to be carried on at the most important area—the local or grass roots level. Hence, the slogan "OPERATION HOMETOWN." Here is the area where you and I, as individuals and as members of a team, can be most effective. Here is where we can utilize more fully the invaluable services of the auxiliary and related groups.

I hope that by the time this is in print, most of you will have had the opportunity of seeing the excellent film presentation prepared by the AMA and featuring our very capable president, Dr. Edward Annis. By this time every county medical society legislative chairman should have received his kits and made his committee assignments. Arrangements should have been made to utilize the very capable and willing members of the local auxiliaries. We hope and expect that every member will work vigorously and faithfully in whatever assignment he is given to insure a successful campaign.

There are those who are faint-hearted, feeling that the odds are too great and that this will be a losing battle. There are others who feel that the timing is wrong and that not much can be accomplished in the summer months, a time of vacations and of traditional diminution of medical society activities at the county level. Nothing could be farther from the truth. Members of the Farm Bureau recently proved in the wheat referendum that the organized forces of the administration could be overcome through a vigorous, tireless campaign. We have very little time in the educational campaign to get across facts that must be told, and told and told again.

Certain encouraging facts are appearing. One was the introduction of a bill by Wilbur Mills, Chairman of the House Ways and Means Committee, providing for a raise in the Social Security tax base from $4,800 to $5,400. He declared his purpose in doing this was to get the Social Security fund on an actuarially sound basis and to call attention to the fact that it is not actuarially sound at the present time.

Another important factor was the announcement by Representative A. S. Herlong Jr.

(D. Fla.), a member of the House Ways and Means Committee, that he is no longer willing to get King-Anderson out of the Ways and Means Committee. He reported that a recent poll of his constituents showed that most of them opposed the plan to finance the aged health care program through Social Security. Even Abraham A. Ribicoff, now United States Senator and former Secretary of Health, Education and Welfare, has been reported as being happy that he does not have to enthusiastically support the administration program and is supposed to be coming up with a "medicare" plan of his own. He has also stated that he would like to see HEW broken up with health and welfare directed by a separate agency.

In my opinion, if we all get in and work to the best of our ability, we can bring the campaign, "Operation Hometown" to a successful conclusion.

Maurice E. Stocke

The Woman's Auxiliary

REPORTS TO ISMA

The summer months are the time to prepare ourselves for the auxiliary responsibilities we have assumed. Our responsibilities are allied with the Indiana State Medical Association, and we welcome the opportunity to contribute our services to the medical profession and to the community.

As of this writing, the delegates of the Woman's Auxiliary to the American Medical Association convention are planning their attendance at the four day session. We will learn what has been done, how it was accomplished, and what the officers and committee chairmen of 1963-64 have planned for the coming year. We always return home with renewed enthusiasm, and make a promise to ourselves to do our utmost in helping to preserve the American system of medical care and service.



The program committee is busy compiling the program book. This book is designed as a guide for the county officers and committee chairmen in planning their auxiliary year.

The legislative chairman is alerting the county chairmen to the many things the auxiliary can do in assisting with "Operation Hometown" when the county medical society outlines the auxiliary's part of the program.

Our members are continuing to collect medical equipment and medical supplies for International Health Activities. Our help to the needy sick and poor throughout the world cannot afford a summer vacation.

The state officers and committee chairmen are planning and compiling their material which will be presented through the area workshops to be held in September. Much thought and effort is expended by the various chairmen in the planning of these programs. It is through these workshops that the county officers, chairmen and other members can best evaluate the program in its entirety as well as in specific areas of interest.

Current events necessitate legislation as our major project. We shall continue our good work with AMA-ERF, Health Careers, Mental Health, Civil Defense, Community Service, Rural Health and Safety.

Zelda K. Sullivan



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Metamucil corrects constipation in pregnant patients without disturbing either the rhythmic or digestive functions of the gastrointestinal tract.

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Research in the Service of Medicine

This was the keynote address given at the Centennial Luncheon sponsored by the American Veterinary Medical Association in Chicago, Ill., April 3, 1963.

A Century's Progress in Public Health

*LUTHER L. TERRY, M.D.**
Washington, D. C.

AN ANNIVERSARY address is an irresistible opportunity for a public speaker. It furnishes him the perfect occasion for a proud review of the past and a bold look to the future. And when the anniversary is a centennial, he can be supremely confident that none of his audience remembers how things were in the beginning, and that none of them will be around to check up on his 100-year forecast.

My position today is still more satisfying, however. For in my review of your past as a profession, I am also reviewing my own branch of the medical profession. And, as I turn through the moment of the present to look into the future, I can predict with confidence that your profession and mine will continue to move forward together, learning from each other and reinforcing each other. We share common achievements and a common challenge. The 100th anniversary of organized veterinary medicine is, in the fullest sense, a centennial in public health.

One hundred years ago, this country was locked in a great war. But disease was the deadliest enemy faced by either army. Typhoid fever, dysentery, pneumonia, the childhood diseases such as measles and mumps, as well as tuberculosis, sepsis, and gangrene killed thousands of soldiers and civilians alike. The morbidity rate in 1863 is not known accurately, but it is reasonable to say it was several times higher than it is today.

Meanwhile, the diseases common to man and animals were just beginning to be recognized. Transmission of rabies by the bite of diseased animals had been known for centuries, but the cause had only been discovered in the early 19th century. The transmission of various animal parasites, like beef tapeworm, pork tapeworm, and trichina, had all been observed. People were beginning to take precautions against these diseases under the guidance of the young, growing veterinary profession in western Europe which was then taking root in North America in the mid-19th century. German veterinarians as early as 1850 described the communicability of tuberculosis.

The importance of animal diseases was recognized much earlier in this country, however. The editors of the first American medical journal, *The Medical Repository*—which was started in July, 1797, in New York City—requested their physician readers to furnish them with histories of diseases appearing among domestic animals such as horses, cattle, and sheep. This was a remarkably advanced and far-sighted proposal. It was made, let us recall, a year before President Adams signed the Marine Hospital Bill, which established the U. S. Public Health Service, and also a year before an English country physician, Dr. Edward Jenner, discovered cowpox vaccine.

* Dr. Terry is Surgeon General, Public Health Service, U. S. Department of Health, Education, and Welfare.

Early Days in Public Health Field

In 1872, when your organization was nine years old, the American Public Health Association was organized to provide guidance and leadership in the public health field. Many veterinarians were among the first members of the American Public Health Association, and much of the leadership in the following decades came from your profession. As the great advances in bacteriology occurred, laying the foundation for the public health program of the nation for the next century, our two professions moved forward together. A text published in 1884 by one of your early leaders, *The Relation of Animal Diseases to the Public Health* by Frank S. Billings, reviewed what was then the current knowledge of disease and disease transmission, and pointed out the relationship between many animal diseases—anthrax, tuberculosis, glanders, and others—and public health problems.

Interestingly, Billings made a strong plea for the establishment of a veterinary division in the then National Board of Health which would be a part of a National Sanitary System. Although his plan was not adopted nationally, it became effective in many local communities where veterinarians became members of local boards of health and were responsible for initiating the first programs for meat and milk inspection.

The discoveries made by Pasteur and his veterinary associates gave an enormous boost to public health throughout the world. Many of the first health departments organized, not only in the United States but throughout the world, were built around Pasteur laboratories where anti-rabies vaccine was produced in rabbits according to the means discovered by Pasteur and his colleagues.

The demonstration that Texas fever was transmitted by ticks—achieved by Theobald Smith and Cooper Curtice of the Department of Agriculture veterinary service—gave important support to those who believed that yellow fever and malaria were insect - transmitted diseases. Somewhat later, French veterinarians discovered tetanus and diphtheria toxoids. The debt owed to veterinary medicine by the public health profession continued to grow as the years passed, and as both disciplines gained strength and maturity.

The story of veterinary medicine in the Public Health Service begins about half a century ago. Public Health Service veterinarians during World War I performed essential functions in controlling animal diseases near military cantonments. Immediately after the war, the service embarked on a national milk sanitation program in which many veterinarians participated, including the distinguished Drs. William Haskell and Franklin Clark.

Public Health Service Expansion

In the 1930's, in the formative years of today's great "research explosion," the Public Health Service brought in Dr. Maurice Hall and Dr. Willard Wright to head up the laboratory of parasitology. These men were to become famous in parasitology, disease control, and tropical medicine. Maurice Hall, as you know, was the discoverer of carbon tetrachloride as a therapeutic agent for human hookworm, after he had demonstrated its efficacy in dogs. Dr. Wright went on to become the director of the laboratory of tropical medicine and today is recognized as one of the world's outstanding authorities on tropical medicine and parasitology.

The expansion of public health in this country, following the reorganization of the Public Health Service in the late 1930's, demonstrated the need for all types of professions in public health. Veterinarians began to take graduate training in public health and received graduate degrees. These men were responsible for expanding veterinary public health activities during World War II. And they and their successors have increased and diversified their contributions to the service in the turbulent and productive years of the immediate past. Our organized veterinary medicine program is located at the Communicable Disease Center in Atlanta, and the influence of your profession extends throughout the service.

Thus, to sum up this brief journey across a hundred years of proud achievement, we

in the public health profession stand indebted to veterinary medicine for a host of specific contributions. We owe to you also, wholly or in generous measure, a number of basic ideas upon which our profession is built.

Problems of Disease Eradication

One of these is the bold concept of disease eradication. A century ago, medicine dared aspire only to a slowly growing number of cures. A few decades ago, we talked in terms of disease control. Today, we brashly dedicate ourselves to the elimination—from our own country, and ultimately from the world—of some of man's oldest and deadliest enemies. Brashly, but not rashly—for we have the means at hand. We know our strength.

Here again, your profession pointed the way. Seventy years ago you demonstrated that contagious pleuropneumonia could be eradicated. Next came glanders—a major public health problem at the time of World War I. Subsequently, American veterinarians erased from our nation such imported diseases as foot-and-mouth disease and fowl plague. Now, bovine tuberculosis is gone from most parts of the United States, and you are confidently envisioning the eradication of brucellosis.

This is an impressive catalog of triumphs—triumphs not merely of containment but of annihilation. We in public health are proud that not a single confirmed case of smallpox has occurred within the United States in more than a decade. Malaria has been brought almost to the vanishing point in our own country. We now have the weapons needed to eliminate diphtheria, tetanus, polio and, most recently, measles. Taking a leaf from your book, we are directing a major effort toward eradication of human tuberculosis. We seemed well on our way toward the total conquest of syphilis until our statistics showed a resurgence, bringing us up short and forcing us to re-examine the assumptions upon which our overconfidence was based.

We seem to be poised on the threshold of great victories in communicable disease control. But neither your profession nor mine need fear that we shall work ourselves out of a job. As problems are solved, others emerge.

Old Problems—New Forms

Some take the form of old problems in new forms. Rabies is one of the oldest health problems known to man. It was described more than 2,000 years ago. The problem of urban rabies has been resolved to a considerable extent through successful canine immunization and stray animal control. But the sylvatic problem is unresolved. The recognition of rabies in the bat population of the United States during the past 10 years has introduced new factors. One of these is the recent demonstration of the probability that the disease is air-borne in caves where young bats are born and nursed. The air-borne transmission of rabies has now been demonstrated over a period of three summers, but the mechanism is unknown. The introduction of factors such as this into the natural history of the disease forces us to re-open books once considered closed. In this case, we must ask if it is possible to eradicate a disease which has such a wide reservoir in nature.

Other long-standing challenges are still posing unanswered questions, testing the combined ingenuity of our two professions. One classic example has to do with the possible existence of an animal reservoir for the influenza viruses. The survival of the 1918 pandemic-type influenza virus in swine lends strong support to this theory. It also implies a continuing threat—that this most deadly form of the influenza virus may strike us again as soon as natural immunity has reached a sufficiently low level in the population. The World Health Organization has organized a world-wide survey to determine if such a natural reservoir exists. The results may shed life-saving light on an old mystery.

We are still contending with bacterial food infections and intoxications. Only two weeks ago, a rare form of botulism—

Continued



The new or early hypertensive patient



The middle-aged hypertensive woman



The geriatric hypertensive patient



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Product Information: 'Capla' (mebutamate) is indicated for control of hypertension, either alone in mild cases, or in conjunction with diuretics or peripherally acting hypotensive agents in more severe cases. Its mild tranquilizing properties are often found an additional benefit to its antihypertensive action.

Drowsiness and occasional lightheadedness, usually transient, are often signs of dosage higher than necessary for therapeutic effect. There are no known contraindications to mebutamate.

Usual Dosage: One 300 mg. tablet 3 or 4 times daily, before meals and at bedtime. Dosage should be adjusted to individual requirements; for example, older patients may require lower dosage.

Composition: Each tablet contains mebutamate, 300 mg.

Supplied: Bottles of 100 white, scored tablets. Literature and samples to physicians on request.

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Wallace Laboratories
Cranbury, N. J.

type E—took two lives in Detroit in circumstances which seem almost incredible in our streamlined, antiseptic civilization. Fortunately, such occurrences are extremely rare. But we still experience periodic explosions of food-borne Staphylococcus infections. The wide distribution of Salmonella in animals requires unending vigilance. This disease has been on the rise throughout the past decade, not only in the United States but throughout the world, which reminds us that not all communicable disease problems have been resolved.

Meanwhile, great new frontiers are opening up for the health professions, and as in the past veterinarians are making essential contributions. The chronic diseases are the great health problems of the foreseeable future. The quest for new knowledge in this area is one of the great adventures of our time, and animal research is at the core of this effort.

Animals in Research

In some cases, health problems of animals are of special interest to public health investigators. Today the Public Health Service is studying the epidemiology of cancer in animals. The isolation of viruses producing avian leukemias, canine mass cell tumors, mouse polyomas, and bovine warts—some of which have the ability to produce tumors in other animals—has profound significance for cancer specialists. Indeed, these discoveries provide one of the most promising approaches to a problem that is of concern to all the world. The World Health Organization has organized an international program in comparative oncology, and many scientists are providing information on the geographic distribution of animal malignancies. This parallels the work that has been done in the human field.

Heart disease is the No. 1 health problem in the United States. Many advances in experimental surgery could not have been made without animal research. The story of the blue baby and achievements along similar lines are all the results of cooperation in this area of animal experimentation. Now we are finding animals useful to evaluate genetics, susceptibility to environmental influences, nutrition, and aging. Swine are found to be excellent experimental animals in which to study atherosclerosis and the effect of diets containing high levels of saturated fats. Dogs are being studied to determine why they seldom have atherosclerosis under natural conditions. In many other studies, large animals are being used to study cardiac functions as well as problems of circulation.

The study of aging processes in various animals is now being initiated in many places in the United States. Among the questions being asked are how aging occurs, and whether it can be slowed or accelerated. In the area of environmental health, Public Health Service scientists, grantees, and others are studying the effect of radiation on animals and their products, and the impact on animals of exposure to various air pollutants. Occasionally, new disease problems are seen in animals which are of interest to the medical investigators. Such a problem was the appearance of epidemic ulcers in swine in parts of the Midwest. Funds for pursuing these investigations are being provided by the Public Health Service.

It will be of interest to this group to know that the Public Health Service in their support of medical research has had high regard for projects involving veterinary medicine and animal disease. This support is given not only for direct research grants but also for providing facilities for carrying on research. An important grant has recently been made to the University of Illinois to support its developing Zoonoses Center.

Interdependence Between the Two Sciences

The sum of these efforts is a swiftly increasing interdependence between medical and veterinary science which seems destined to grow indefinitely in the future. In the United States today, millions of animals

Continued



For comprehensive control of the whole pain complex... helps the whole patient

Like a triad, the action of Trancogesic is direct and simple as 1,2,3. Its tranquilaxant component — chlormezanone — 1. reduces emotional reaction to pain . . . 2. decreases skeletal muscle spasm . . . and 3. its aspirin component dims the patient's perception of pain. Thus, Trancogesic controls the *whole* pain complex, helps the *whole* patient — *with unsurpassed tolerance.*

Each tablet of Trancogesic contains 100 mg. of chlormezanone and 300 mg. (5 grains) of aspirin. The usual adult dosage is 2 tablets of Trancogesic three or four times daily; the dosage suggested for children from 5 to 12 years is 1 tablet three or four times daily. Reactions to Trancogesic have been minor — gastric distress, and an occasional weakness, sedation or dizziness. Ordinarily, these may be reversed by a reduction in dosage or temporary withdrawal of the drug. Trancogesic is contraindicated in persons known or suspected to have an idiosyncrasy to acetylsalicylic acid. WINTHROP LABORATORIES, NEW YORK 18, N. Y.

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are used in research annually. As a result of this widespread dependence on research animals, there is a demand for research in laboratory animal care, development, and medicine. This is of particular interest to the veterinary profession because of its unique responsibilities in this field. The Public Health Service realizes that it too has special responsibilities in this field and is now exploring ways in which to develop and administer a national program to support laboratory animal research by developing programs throughout the nation which will meet the many urgent needs in this field.

One development of special significance is the establishment by the Public Health Service of a national program consisting of seven regional primate research centers. These are research facilities especially designed to carry out experiments and house certain species of subhuman primates. In these centers, a resident staff as well as visiting and associate scientists representing many disciplines will have the opportunity to conduct research. This will advance knowledge about the background characteristics of both healthy and diseased primates, throughout their life span, and will produce basic scientific information with great potential value in the treatment and prevention of human disease.

All of these developments, and others still over the horizon, impose heavy responsibilities upon our two branches of medicine. You are, I know, keenly aware of the continuing necessity for vigilance in the area of humane treatment. As the use of animals in research becomes more diversified, your ingenuity and compassion are subjected to still greater challenges. Your past record and present performance speaks eloquently for your ability to meet these challenges.

In a quite different field, the great proliferation of research knowledge imposes upon us new challenges in the art and science of communication. It has become impossible for one man to keep pace with all the developments even in his own narrow field of specialization. Therefore, it behooves you to keep continually aware of developments in public health, just as it behooves us to inform ourselves about veterinary advances. We need to develop new and improved two-way channels.

The American Veterinary Medical Association enters its second century on a note of triumph. You stand now upon a record of achievement that would have been beyond the wildest hopes of that group of men who met in New York in 1863, a month before the battle of Gettysburg. I am sure that your successors, celebrating a second centennial, will look back upon your achievements as a fascinating prologue to another century of progress. And I am sure that the public health profession, then as now, will look to veterinary medicine for leadership and partnership in our joint adventure. ◄

ESCORT YOURSELF . . .

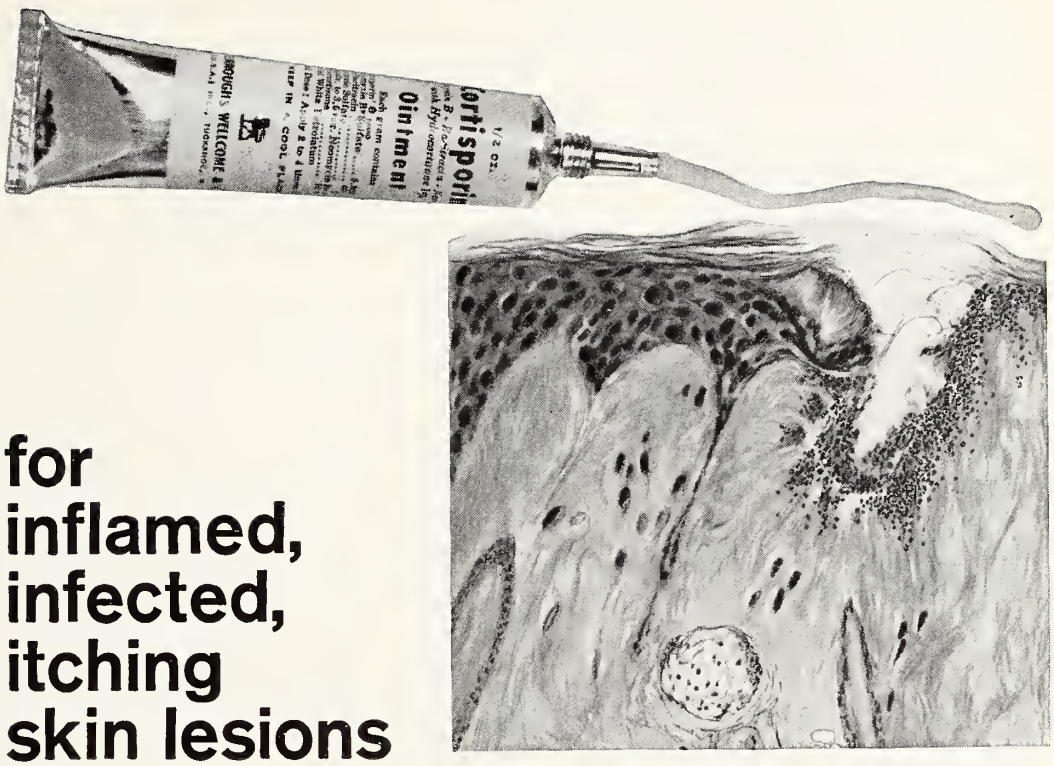
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Presented at the 12th County Medical Societies Conference on Disaster Medical Care, Palmer House, Chicago, Illinois, November 4-5, 1961. Sponsored by the Council on National Security, American Medical Association.

The County Society and Disaster Medical Care

Rural Medical Support for Target City Disaster

*I. W. GAJAN, JR., M.D.**
New Iberia, Louisiana

IN CONTRIBUTING to this symposium on target city disaster medical support by rural county medical society members, it is difficult to compress and distill the work, study and plans that have matured since World War II. I hope this necessarily incomplete and brief résumé of plans and procedures in Iberia parish, Louisiana, will assist other society disaster medical care physicians to set up training and operational programs. With minor modifications, the plan can be used on a state and higher level for any disaster medical installation. Using such a skeleton outline, coordination of medical and health services over large areas could easily be achieved.

Having had medical experience overseas in World War II, my interest was aroused by the Smyth Report of 1945 on the casualty-causing potential of the new sciences. At that same time, the AMA, through the advice of this council, was alerting people to the necessity of civilian preparations for disaster. It was in 1951 that I was appointed city Civil Defense director "for health services." I drew up a tentative medical care plan and presented it to the Iberia Parish Medical Society. (Our parishes in Louisiana are the same as your counties.) At that time neither the public officials, nor the general public took much interest.

This was, and still is to some extent, the national attitude on the subject, except where a local disaster arouses local interest for the moment. In our area in 1957, Hurricane Audrey gave us a mild baptism of fire, and just two months ago Hurricane Carla gave us a smaller workout.

Since 1951, I have read, studied and accumulated a vast amount of material on all phases of the subject. It has been obvious for a long time that in case of attack, we physicians in the rural parishes will bear the load. I spoke to as many persons as I could, and ultimately in 1955 the governing body of the parish hired a retired Army officer as Civil Defense director, and made a small appropriation for stationary, supplies and minimal office equipment. We now had an active Civil Defense organization, but we had no matching funds at all for any of the medical programs I will discuss with you. However, it was possible to formulate positive plans.

Secretarial work was done by volunteers such as myself, my wife, my own secretary, some legal secretaries and the director in his spare time. The director appeared with me before the parish medical society, and I presented a tentative plan, including an advisory committee, which was accepted. The organization chart, with modifications for recent changes in concepts, is shown in Chart I.

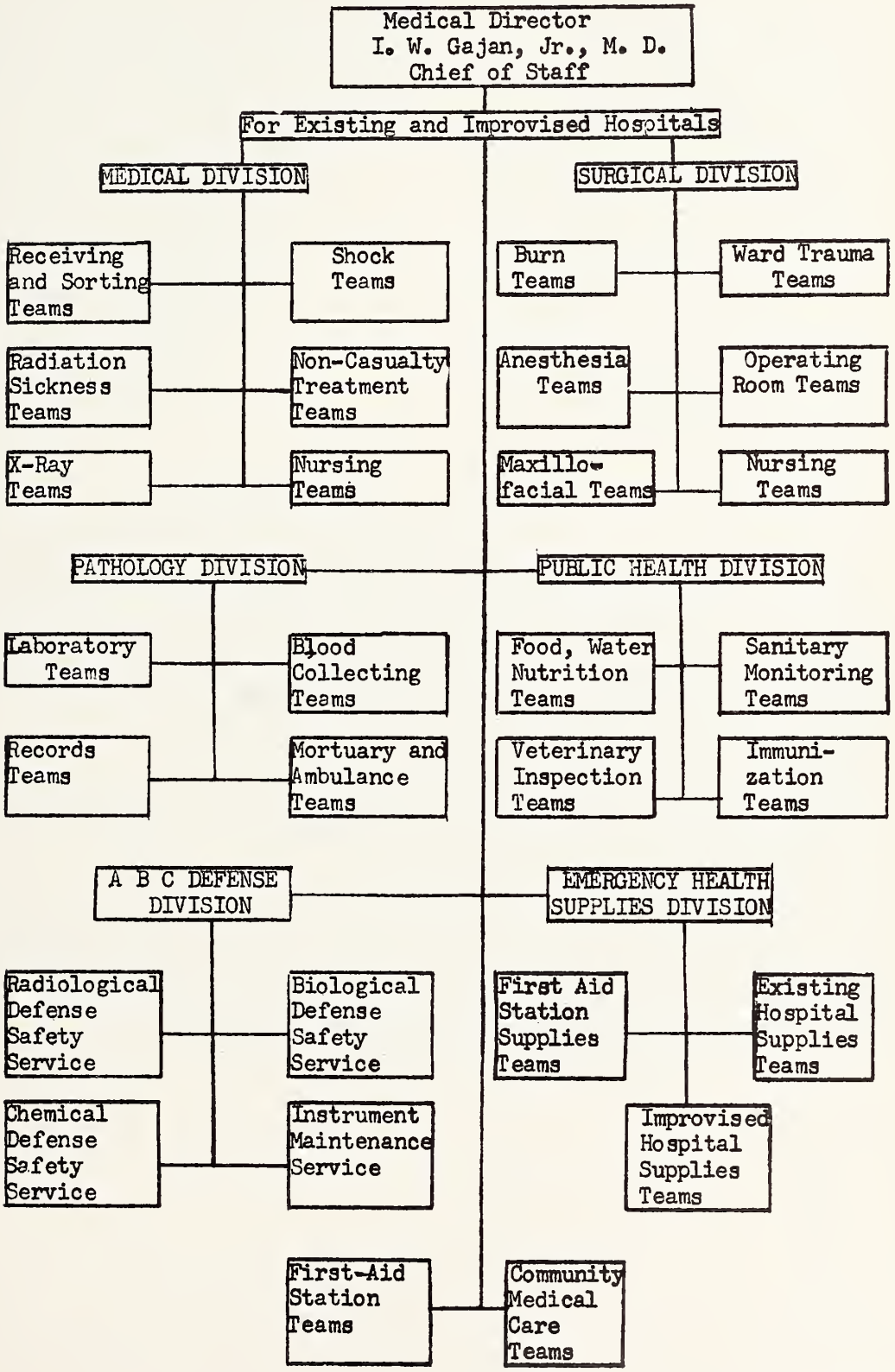
Survey Help Available

Any workable plan must proceed first from a detailed survey of all the active and

* Doctor Gajan is Chairman, Committee on Federal Medical Services, Louisiana State Medical Society.

MEDICAL AND HEALTH SERVICES ORGANIZATION

IBERIA PARISH CIVIL DEFENSE



inactive professional, technical and volunteer lay personnel available in the parish. Equally as important is detailed information on all fixed active and inactive medical facilities. Then a supplies on hand survey should be undertaken, and liaison instituted to secure replenishment when needed. The medical and health plan must consider and allow for the possibility of absorbing target area and mutual aid physicians and allied personnel into the rural parish teams in the post-disaster phase.

Only when enough interest is aroused to get people to sacrifice their spare time, can you institute effective orientation, training exercises and dry runs. The two latter phases of medical disaster planning are the hardest to accomplish in any community. One man's experience, for what it is worth, indicates that about 20% of all professional and technical personnel signify they will come to take special courses, about 5% are willing to act as instructors—if it doesn't take too much time—and an even smaller percentage of the general public will form a class for survival training, at least at the present time.

The survey phase can be easily accomplished by a mimeo letter requesting medical and allied persons to state their first and second choices of duty on the various "teams" shown on Chart I. They are also requested to indicate if they will serve in an improvised hospital or other mobile medical facility, or both, in addition to an existing hospital. It familiarizes the medical director with his entire potential, even though they belong to and work in a variety of institutions. In our community, it is easy to apply the plan and the assignments to the entire parish. In larger counties, large hospitals and clinics can organize on the same lines and also supply the director with teams to perform the functions peculiar to the overall problems. However the medical director must receive all the data, and have the authority to make suitable changes to fit into the area, state, regional and national picture.

It is vital to effective post-disaster action, that the medical chain-of-command be maintained separate from other disaster relief activities, and decentralized in a local active physician with *authority* to act. The practicing physicians of the state and county medical societies are the logical units to make medical, hospital and overall health decisions for disaster. The county medical societies are the family units of peacetime medical and health services. Why not in disaster?

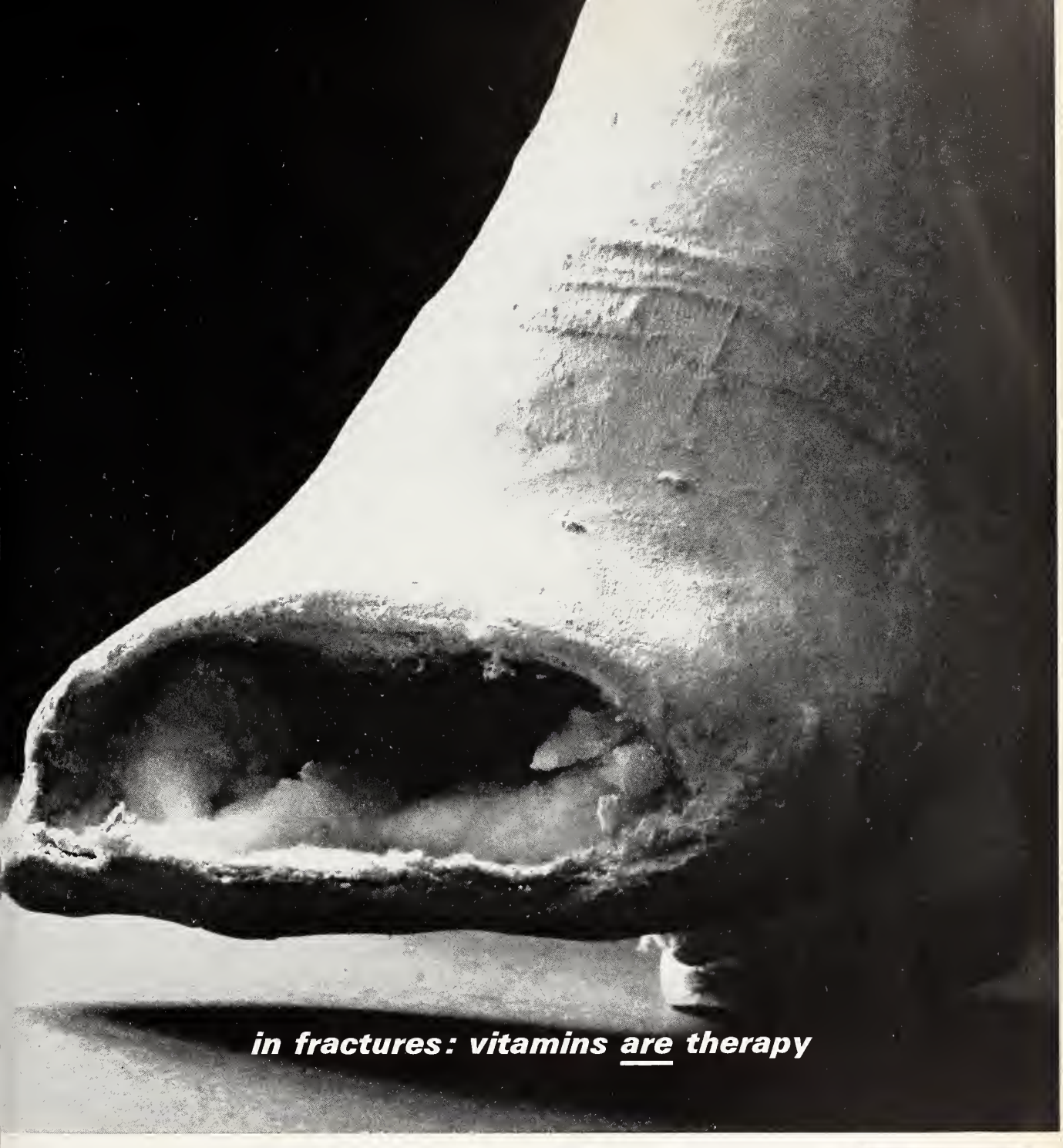
Physicians Have Organizational Know-How

In conjunction with dental, nursing, pharmaceutical, hospital, veterinary, mortuary, coroners' offices and public health associations, the medical society in the undamaged county is the organization with sufficient coordination experience and the special knowledge amongst its members to direct a successful medical and health disaster operation. Physicians with military medical experience are best suited to direct such planning and training. Suitable incentives for the time and expense required, and adequate tools to work with must be provided by the civil authorities. Incidentally, these surveys must be repeated and updated as often as is necessary so that each person is reminded of mass disaster problems and suitable alterations of assignments can be made.

After completion of the individual surveys, every professional and technical person was given an "assignment slip" indicating a *specific team* assignment at a *specific existing duty facility* and informed how he would be alerted if needed. Since under certain circumstances special team skills would be needed for activating only an emergency or first aid station, as after hurricanes and floods, the teams required were given an "Alternate 1" assignment to that type of facility. In still another disaster it may be necessary to staff, or transport personnel to staff a Civil Defense emergency (200-bed) hospital. Only the teams needed to staff that sort of facility are given an "Alternate 2" assignment. No person or team has all three assignments—all have a primary fixed facility assignment, and only those necessary have either an alternate 1 or alternate 2 assignment.

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Continued



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facility stations. If we need only the CDEH people, we will call for only alternate 2 medical personnel to report to a specific rendezvous point for transportation or other instructions. All medical facilities, as well as everyday care for local people, will have minimal team staffing at the outset of an operation. As the disaster picture unfolds, relief assignments and adjustments will be made by the medical director. Since communications are vital to continued operation, each group of teams at each facility has a chief of group who can transmit his supply and other problems directly to the medical director, or through the hospital chief of staff (Triage physician).

Physician Trains the Teams

The chief of each group of teams is a physician, and is responsible in the predisaster period for the training of the nurses, dentists, veterinarians and lay aides on the teams of his group. This delegation of authority and responsibility is important for teamwork. Overall communication will be in consonance with C.D. radio security. Since there are several teams in each functional group, we are not entirely dependent on one set of persons to carry the whole load around-the-clock. Many persons will not be available when needed, so a strict hospital staff hierarchy cannot be maintained in certain disaster situations. In those instances, the medical director can direct a replacement team from any other facility not needing it, to fill the gap.

If, for example, the health unit needs additional help, the medical director can assign a temporary team to it. Likewise, if a hospital needs an extra team, the health unit physician and nurses can function as trauma ward or shock ward teams. Assignments follow exactly the special field of the person, and he or she is assigned to the facility of first or second choice, so far as is possible. A dermatologist may have to form a burn team, or an allergist a blood collecting team. It would be only during a mass disaster that a key hospital team may be asked to serve elsewhere.

If the disaster medical problem is a small one, we will not need to mobilize the entire medical plan. Doctors and hospitals are constantly handling small disasters, so there is already an efficient setup in present staff procedures. Without firm, knowledgeable authority, and command of supplies resources placed in the medical director, to fill vital needs first, panic can take root in a medical community as well as a lay community in mass disaster. Wide geographic areas are involved, therefore, we need wide authority and control if the most good is to be done for the most people, with the least waste of remaining doctors, nurses, and supplies. "Triage" must be applied to medical personnel, facilities and supplies, as well as to casualty care. The usual peacetime procedures will not work, as military medical men know.

In our organization there are six major divisions: medical, surgical, pathology, public health, A.B.C. defense and emergency health supplies. Under these divisions there are groups of teams for each function noted in the boxes in Chart I. Each division is headed by a physician who also heads a team—he may also be the chief of the group of teams of which he is a team member as well as chief of peacetime staff in that specialty. There are no "deadheads." The coroner (who is a physician) heads the pathology division with its important functions. Our health unit director, who incidentally runs three parish units, heads the public health division. He has been asked to designate a local physician as a substitute for his functions if he cannot be present.

A physician heads the emergency health supplies division, with an experienced pharmacist as his assistant. The A.B.C. defense division will advise and supervise all procedures pertaining to radiological, biological and chemical defense security and safety in the mass situation, and in all functioning medical facilities. Active and inactive registered nurses, licensed practical nurses and nurses aides are assigned to every team needing them. Physician and nurse teams, on a minimal basis, will form teams to make emergency calls for the community illnesses of a non-casualty nature, including uncomplicated home deliveries, during the acute

phases, in all populated areas of the parish. We may even need to ask the community medical care teams to supplement, or take six to eight hour shifts at a casualty facility.

The existing hospitals have been asked to designate *functional areas* for maximum operating room suites, a large triage area, shock wards, trauma wards, burn wards, walking casualty area and non-casualty wards. They have furnished the medical director with floor maps of designated areas. They have kept a master copy for their own use in an easily identifiable disaster file where they keep supply and other data. We contemplate the possibility of patient evacuation and strategic dispersal of our personnel, so reception area agreements have been made by the C.D. director. Neither a medical facility nor a population should move until it knows where to move. The new location must be safe and the facility must be suitably accomodated to continue operations.

Medical Directorate Set-Up

The most important team of all is the *medical directorate* at the Civil Defense control center. It consists of: 1. myself as medical and health services director; 2. the coroner as head of the pathology division and his mortuary assistant (the coroner will direct mortuary activities, blood collection teams, ambulances, emergency medical records and laboratories); 3. the head of the emergency health supplies division and his pharmacist assistant; 4. the head of the A.B.C. defense division and his chief radiological monitoring officer; 5. the head of the disaster nursing services for all facilities; 6. the head of our trained casualty first-aiders, ex-service medical corpsmen and other medical services volunteer personnel; 7. the head of the public health services division and attached veterinarians (the latter will join hospital teams if needed); 8. the head of medical facility chaplains; 9. American Red Cross first-aid, and hospital administration representatives. All of these assistants are not needed simultaneously, nor will they all be needed for every disaster. When not needed, they too will work in an active facility on another team needing help.

At all fixed and improvised hospitals, the triage officer is the mass disaster chief of staff (or commanding officer). Since all casualties must come under his team scrutiny and he has all the admission and disposition records, he must be a doctor of mature judgment and wide experience. He is in the best position to direct the entire operation in that facility.

All our presently surveyed skills give us a potential of about 400+, and we continue to discover new people who can contribute something to the medical effort, such as explorer scouts for litter-bearing, messengers, etc. We also need hospital control personnel to direct traffic and maintain order. We are recruiting them into the working Civil Defense pool. The director wants them all to qualify and obtain their C.D. cards and identification stickers which they will need for proper police clearance in mass disaster.

Casualty First-Aiders Program

The second program of the Iberia parish disaster medical organization is my pride and joy—we call them the casualty first-aiders. When devised in 1955, we had much difficulty tearing people away from TV, but we succeeded in training a fine pool of dependable persons in the elements of survival. The instruction is called a "casualty first-aid course." I like to call it a "working with people" program of training for self and neighbor care. The trainees are helpful also as volunteer aide personnel in the medical and health services plan as well as other C.D. services.

So far as I know, at the time I devised it, it was the only one of its concept and kind. The plan was to train everyone possible, or at least one in every family, in disaster first-aid and survival medical care. An important part of the instructions, not taught elsewhere, are the basic principles about C.R.A.B. disasters (chemical, radiological, atomic, and biological). Hurricane protection instructions are part of the basic course. Here again the "let somebody else plan my survival" attitude of people is a potent factor to contend with. There is also the difficulty of securing competent instruc-

tors who will take the time needed to devote to such a program on a volunteer basis. Despite these problems, a competent inactive nurse, also volunteer, has assisted immeasurably in training scores of persons.

Many of the trainees liked the course so well they have returned to sit in and assist at subsequent classes. They now have more confidence in their ability to cope with the worst disaster. Each graduate, when he completes the course takes the security oath, and obtains his Civil Defense card. The C.D. director has made successful completion of the course a requirement for qualification in any branch of C.D. service. In addition to individual survival knowledge, it provides an excellent vehicle to study all the varied services of a competent C.D. operational capacity. As soon as we have enough *men* in the pool of trainees, I plan advanced (medical corpsman type) training for the casualty first-aiders.

Much of the content of the course is in oral lectures, and is based on the knowledge and experience of the instructors, and the practice sessions of the trainees. Two sessions are devoted to the effects of nuclear weapons, chemical and biological warfare and medical services organization. These must be given by a physician with training in these subjects. The rest of the course can be given by registered nurses, under the guidance of the physician, so the class may grasp the best survival concepts. My course does not compete with the Red Cross course. In fact, many of their trainees have found that our course gives them knowledge they could not get in other courses. We use several homemade visual aids, and the outlines are mimeographed, so the costs to the taxpayer are minimal.

Sixteen Crowded Hours

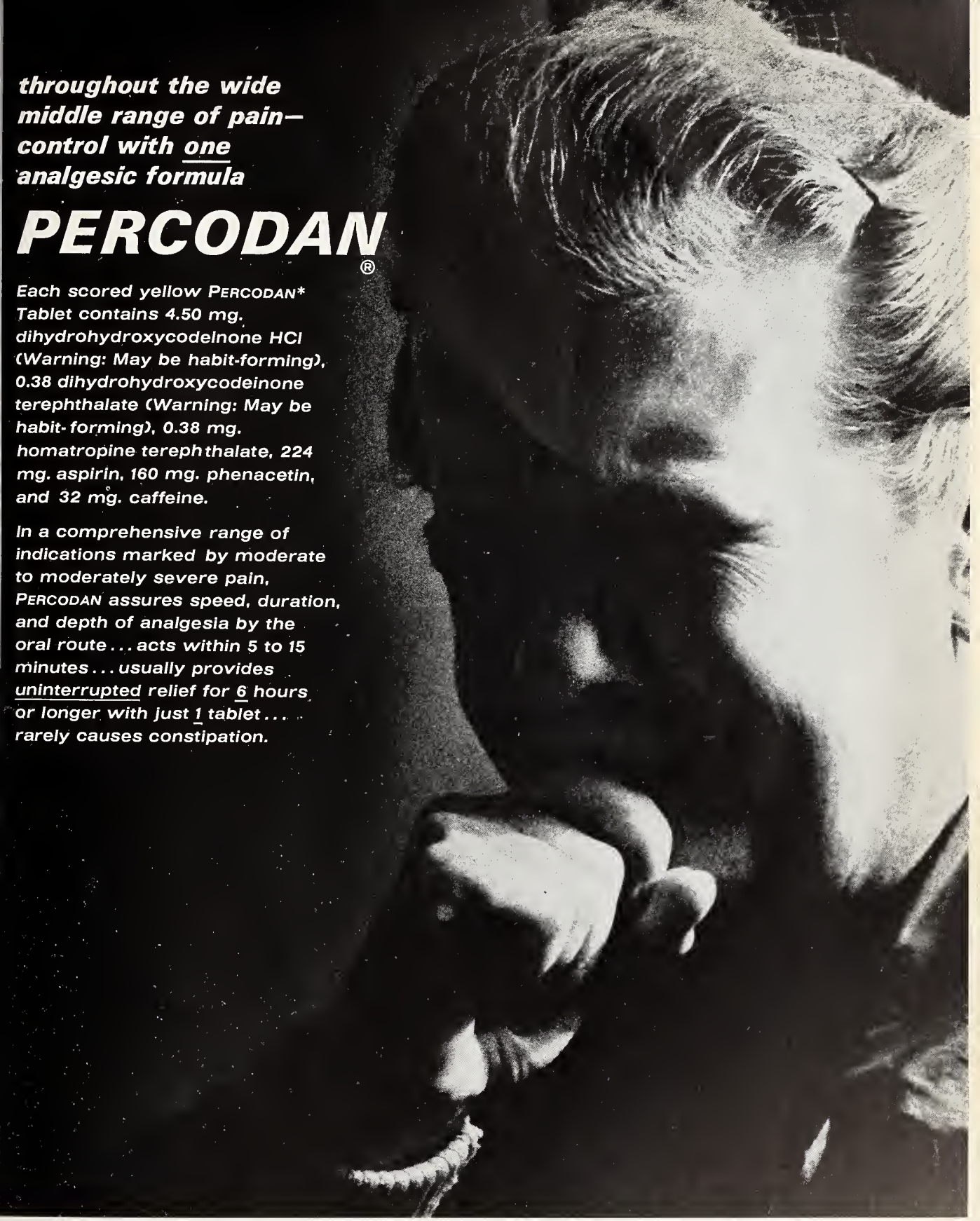
The pre-course session is a two-hour orientation session at which the Civil Defense director and his assistants are present. They explain the strategic situation of the moment, and the purposes, organization and procedures of Civil Defense on a national, regional, state, area, parish and city level. The medical director then organizes the class, and briefs them on what we expect to accomplish in the next four weeks of two-hour sessions twice weekly. Not until after each session does the trainee receive his copy of the outline material for that session. By the time they are through with the course, they have the whole set.

At the next session, the class has a 10-minute review period of the material presented previously. In the practice periods, casualties are tagged with specific injuries, trainees are required to apply the proper measures, and the instructor checks and corrects before the entire class, so that all can learn the pitfalls. We find we must start with a minimum of 30 trainees, so as to pair them off for proper practice sessions. The C.D. director and one or more of his assistants are present at every session. The unique, effective, and I think most helpful part of each course is that we require each trainee to purchase a small cheap suitcase of standard size, and to outfit it as a family first-aid kit, using almost entirely improvised materials suggested by C.D. for a household first-aid kit.

We include salt and soda for shock treatment, and iodine crystals for water purification, as well as ingested I^{131} discrimination. They cut their triangular bandages and make their splints in the class. Such learning by doing is valuable training for the non-medical person. Home and field sterilizing technics and antisepsis are stressed. Boy Scouts are invited to demonstrate bandaging and knot tying rescue skills. A C.D. Geiger counter, personal dosimeters and radioactive sources are demonstrated, and the class is shown how easily errors in reading and interpretation can be made by untrained persons. They are taught hemorrhage arrest, airway-to-airway resuscitation as well as all the other useful methods, also the best way to aid an anticholinesterase-agent casualty.

External heart massage and the signs of death are included, as well as moving and transportation of all types of injured and other skills within a layman's capacity to employ; how to use emergency medical tags and records; all about fallout and shelter problems and minor nursing technics. They are encouraged to make notes on the backs of their lesson sheets. They are also asked

Continued



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to buy a standard first-aid textbook, and to keep it for reference in the kit, along with the course outline. They are told to protect the kit from dust and to place it in the trunk of their car (if they have a home shelter another kit should be made and kept there). They have painted their kits red, white and blue and have pasted medical C.D. decals on the outside. They proudly march in parades on patriotic holidays with the kits, white coveralls and pith helmets. Many have used their kits for minor injuries. Their esprit-de-corps is remarkable to see.

After 16 crowded hours, the last session is devoted to extra casualty practice, and our director takes motion pictures of the class busy working with casualties. The film is shown on a separate graduation night, when they take their oath and receive their C.D. cards. We are trying to get all public officials, their wives and older children to take the course.

Of the some 16 major, lay volunteer skills needed at medical installations, we already have several amongst our trainees. Even some of our registered nurses have taken the course and have found it helpful to them. During Hurricane Audrey, our casualty first-aiders ably manned a school refugee center. I know them all, and I am sure they will perform well in a mass situation. Since in every disaster we will have frightened people who will seek out comfort and guidance from "someone who knows," we believe our casualty first-aiders know some of the answers.

We Can Preserve Our Nation

Wild rumors, false reports from unreliable sources and downright panic reactions have caused more casualties than the actual calamity in many disasters. We know, because we experienced some of these false reports in our hurricane near-misses in Iberia parish. As medical director, I helped man the Civil Defense control center throughout the alerts, to be available for medical emergencies—thank God we had no serious injuries. Our problem in the larger picture, as I see it, is that as responsible members of our respective communities, we doctors need to convince people that all life will not cease, even in the worst man-made catastrophe. We must continue to prove that, with the indomitable American spirit, there is a way to preserve our great nation, and we have the will to do it.

May I, at this time thank the council, and all of you, for the opportunity to address such a distinguished and dedicated group of persons. In conclusion I say: Yes, some of us in the rural counties of America are planning to take care of "you all" (in the plural) in the metropolitan target areas. All we ask in return is that, if that guidance system goes haywire, and we get the "ton of bricks," you will reciprocate for us. For all these many years, yea, even since before there were 13 colonies, we in south Louisiana, particularly Iberia parish, have been helping feed you with sugar, sweet potatoes, rice, gumbo, seafood, crawfish, hot pepper sauces, salt, etc.; and now we are heating and cooling your homes and businesses with oil and gas. We want to continue doing that in a world at peace with God and man. ◄

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Gleaned from the British Medical Journal

JACK W. HICKMAN, M.D.
Indianapolis

There are few things that raise the ire of surgeons as much as the suggestion that a large number of their patients are being operated on unnecessarily for mistaken diagnoses of acute appendicitis. Such a report in this journal[1] started up a controversy that took some six months to die down. Numerous letters were sent to the editor. Dr. Harding is a pathologist who reviewed some 13,000 appendices, and reports on the number of normal appendices in this group. His study shows that 39.6% of these specimens were both macroscopically and histologically normal. As if this weren't bad enough, the figures are even higher if one considers merely female patients, this percentage being 47.7%. Dr. Harding is not through, however, because he reports that 62% of the appendices were normal in female patients in the age group from 11 to 20 years. He touches only briefly on the differential diagnosis involving ruptured ovarian follicle, pelvic inflammatory disease, etc.; but he has already made his point. These percentages are, of course, higher than in previous reports, but it is hard to attack his methods of study which point out that this relatively basic diagnosis may not be as simple to make as some physicians think that it is.

* * *

A fine review article is presented by the respective professor of Obstetrics and Gynaecology at the University of London.[2] Dr. Browne deals thoroughly yet succinctly with the subject of prolonged pregnancy. Post-maturity is not a frequent complication, Dr. Browne's estimate being that it occurs in only perhaps 3% of pregnancies. However, the condition is important enough to warrant careful planning and study. He stresses the fact that the volume of amniotic fluid decreases abruptly with post-maturity and mentions the significance of this finding. Helpful points are given in the diagnosis and evaluation of this condition. He suggests that if there is any hypertension or pre-eclamptic toxemia or if the woman is over 30, it is best to induce labor at the end of 41 weeks at the latest and often earlier. He again stresses the fact that the combination of prolonged pregnancy and hypertension or toxemia is particularly lethal to the baby. He recommends medical induction of labor to be followed by surgical induction if labor is not started within 24 hours. Furthermore, he recommends that if surgical induction is not successful within 48 to 72 hours, caesarean section should be undertaken. Generally, this is a fine article and has very clear-cut advice for the management of this condition.

* * *

With the recent flurry of interest in hyperbaric oxygen therapy, an article by Illingworth[3] should be of particular value to anyone considering the installation of such a unit. The author presents his work with this therapeutic modality at the University of Glasgow. Both experimental and clinical data are presented. They have used their oxygen chamber mainly for circulatory occlusions in both extremities and cerebral vascular disorders. The largest series is on patients with peripheral vascular disease. These patients were treated in the pressure chamber for two to three hours a day up to 15 days. Nine patients claimed they have gained relief from their pain. However, in some of these patients, the pain returned when the patients were out of the chamber. The author stresses that this is a particularly difficult mode of therapy to

evaluate because the very nature of it tends to permit subjective improvement in the patients because of the unusual nature of the therapy, interest taken in the patient, etc. There were no untoward effects from the treatment in two atmospheres of oxygen as some had felt there might be. Certain further studies along this line will be looked for with great interest in the future.

* * *

An unusual form of therapy for Meniere's disease is presented by James et al.[4] This group from the United Bristol Hospitals reports on their success with ultrasonic therapy for this aggravating condition. The objective of therapy is to give relief from this condition without any damage to the auditory function of the eighth cranial nerve. The ultrasound is applied to the temporal bone while continuous irrigation is employed to avoid damaging increase in temperature. The most serious complication that occurred was facial paralysis. They thought that the potential benefits outweighed the risk of this complication. Their series consisted of 40 patients, 20 of whom had complete cessation of attacks of Meniere's disease following therapy and eight patients who had diminished attacks, but that were not quite abolished. Decreased hearing followed in only ten of the 40 patients and ten patients, surprisingly enough, had an improvement in their hearing of ten decibels or more. There are certainly a number of potential hazards with this procedure, but modifications and improvements of it may be very worthwhile in the future.

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Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Doctor may be Liable for Injury to Hemophilic Infant—A $40,000 judgment for injury caused by a physician to an infant suffering from hemophilia was reversed on appeal, but was remanded for a new trial. The Oregon Supreme Court ruled that two out of three allegations of negligence were submitted to the jury without sufficient evidence.

An 8-month-old infant boy was under the care of a two-man medical partnership. One of the partners knew that the child was suffering from hemophilia, the other did not. The latter, in treating the child, forceably pushed back the foreskin of the child's penis causing it to bleed. The bleeding continued for 48 hours despite treatment by the partners. The child was then referred to a specialist who gave two blood transfusions which stopped the bleeding. The child suffered a loss of part of the frenulum and a scar on the penis.

The court held that the evidence was sufficient to permit the jury to find that the physician was negligent in treating the child in such a way as to cause bleeding when he should have known that the child was a hemophiliac. It held, however, that there was no medical testimony which would permit the jury to find that the partners were negligent in failing to treat the bleeding properly. It also held that the evidence was sufficient to support a finding of negligence in failing to diagnose the child's condition as hemophilia, but no evidence that the negligent diagnosis led to improper treatment. The court said that negligence in diagnosis does not give rise to liability unless it is followed by improper treatment. Because the latter two issues were improperly submitted to the jury, a new trial had to be ordered.

The court also said that an instruction that the jury could, in awarding damages, consider the present purchasing power of money was not improper. There was, also, no error in refusing an instruction that the theory of damages is compensation, not punishment. In either case, the trial court had discretion to grant or deny the instruction, the appellate court said.

Willard v. Hutson, 378 P. 2d 966 (Ore., Feb. 27, 1963).

Suit Filed Charging Thalidomide Deformity—Parents of a child deformed at birth filed a suit on March 22, 1963, for $2,373,000 damages against William S. Merrell Co. and Richardson Merrell, Inc., as manufacturers of the drug thalidomide under the trade name, Kevadon. The suit, filed in the Federal Court in Philadelphia, claimed that the child was born with numerous permanent body and brain defects resulting from the use of the drug as a sedative by the mother during pregnancy.

Thalidomide Test Case Begun in West Germany—On March 13, 1963, the first case involving an infant allegedly deformed because the mother had taken thalidomide during her pregnancy went to trial in Hamburg, West Germany. The drug was sold in that country as Contergan, a tranquilizer. The case involves a 16-month-old child whose hands and arms were deformed at birth. A continuance was granted until April 3 at the request of the defendant drug

manufacturer. The trial judge predicted a years-long trial.

Aspirin Tablet Gives Rise to Damage Claim—Damages in the amount of $55,000 have been asked for the aftermath of the alleged negligence of hospital employees in giving an aspirin tablet to a child patient. It was claimed that the child was admitted to the hospital for foot surgery, but that aspirin negligently given to her by hospital employees caused her to stop breathing and her heart to stop functioning. To save the girl's life, a tracheotomy was performed, an incision was made in her chest, and cardiac massage was given without the consent of her parents. The suit was filed in December, 1961, in Albuquerque, N. M.

City Sued for Death of Baby Denied Hospital Admittance—New York City is being sued for $1,000,000 for the death of a 2-month-old girl from pneumonia the day after two municipal hospitals allegedly refused to admit the baby. The mother claims she took the baby to one hospital which refused to admit the child but sent her in an ambulance to another hospital which also refused to admit her. The mother said she was forced to take the baby home in the rain. The city denied any negligence in the case.

Patient Recovers for Chloromycetin Reaction—A record judgment of $334,000 was awarded to a California woman who suffered drastic reactions from the antibiotic Chloromycetin. A jury held the doctor who prescribed the drug and the company which manufactured it liable for damages. A pharmacist was exonerated.

It was claimed that the drug caused the patient to contract aplastic anemia. Testimony at the trial showed the following: The doctor prescribed the antibiotic for a sore gum after a tooth extraction and again for a bronchial condition. A prescription was refilled six times, upon authorization from the doctor's office—usually from his nurse. The patient underwent 60 blood transfusions and massive dosages of male hormone to combat the anemia. Thereafter a beard grew on her face, her complexion became red, and her face was disfigured by acne.

It was alleged that the doctor was negligent in prescribing the drug under the circumstances and that the manufacturer was negligent in failing to warn the medical profession of the dangerous side effects of the drug.

Love v. Wolf, Super. Ct. of Shasta Co. (Cal., March 16, 1962; motion for new trial denied, May 17, 1962). ◄

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A Report on the Blue Shield Preferred Program

(One of a series prepared by Blue Cross-Blue Shield)

During recent years our sales effort has continued to stress the importance of adequate Blue Shield protection. Emphasis has been placed on selling the preferred surgical and anesthesia schedules, preferred in-hospital medical protection, and the $50, $75 and $100 diagnostic x-ray and pathology endorsements. Every effort has been made to sell new accounts and convert old accounts to broader benefits, and we continue to offer preferred surgical and in-hospital medical protection to our direct pay members who originally obtained their membership through a group.

This sales effort has paid off. At the end of 1962, more than 51% of our account membership was protected by either the preferred or special programs. Last year the corresponding figure was 46%.

Blue Shield believes that many of our problems would be solved if most of our membership was protected by our preferred or special programs.

What kind of a job is being done for the members protected by the preferred and special programs? To evaluate effectiveness in 1962, we repeated our test of performance report to find the current answer to this question: "Does our allowance still equal the normal charge?" The data contained in this report was based upon information entered on claim forms by doctors.

The test of performance report for 1962 indicates that the preferred certificate is paying full charges in 7 out of every 10 cases, distributed about equally by procedure regardless of frequency or cost. This distribution indicates that the preferred certificate pays in full nearly all cases requiring the normal amount of skill and care in treatment. On the average, our members paid only $17.00 of each $100 of services received.

This proof of performance is one of our major selling points in pushing the preferred program. Another advantage found in the preferred program is the removal of the standard schedule limitation which provides a $200.00 maximum payment for related conditions in any six-month period.

The removal of this limitation assures a member who has preferred coverage of receiving benefits geared to his real needs. It eliminates most of the problem of claims not paid because benefits have been exhausted.

The superlative features of our preferred surgical benefits are graphically illustrated by a comparison of payments actually made for a Blue Shield member hospitalized with multiple injuries sustained in an automobile accident. Also shown, for comparison, are the payments that would have been made under our standard schedule, and under $300 per condition benefits.

	WOULD HAVE BEEN PAID		ACTUALLY PAID
	$200 Standard Schedule	$300 per Condition	Series 300 Preferred
Suturing of Wounds	$ 50.00	$150.00	$ 150.00
Fracture of Leg	150.00	150.00	275.00
Fracture of Ankle			165.00
Fracture of Knee			150.00
Fracture of Finger			15.00
Fracture of Nose			25.00
Fracture of Facial Bone			50.00
Tracheotomy			75.00
Excision of Lesion			15.00
Skull Fracture			597.00
	$200.00	$300.00	$1,517.00

Because the preferred schedule is doing a good job, Blue Shield will continue to make a maximum effort to push it, along with the increased in-hospital medical and diagnostic x-ray and pathology programs during the period ahead. ◄

W. C. Huddlestone
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TAPES OF THE MONTH

INTESTINAL TRACT

IT-9016 **PATHOLOGICAL CONDITION OF THE UPPER GASTROINTESTINAL TRACT**—J. Stanley Battersby, M.D., Indianapolis, moderator; George H. A. Clowes, Jr., M.D., Charleston, S. Car.; Fred M. Hunter, M.D., New Orleans; Robert C. Horn, Jr., M.D., Detroit, Mich.; Jerome F. Wiot, M.D., Cincinnati, Ohio. Recorded: Indiana State Meeting. Date: Oct. 9, 1962. Time: 1 hour, 25 minutes.

CHEST AND RESPIRATORY

CR-12004 **MANAGEMENT OF THORACIC EMERGENCIES**—Jerome C. Cohn, M.D., Lexington, Ky., moderator; "Medical Aspects," R. Drew Miller, M.D., Rochester, Minn.; "Surgical Aspects," E. Stanley Crawford, M.D., Houston, Texas; "Radiological Aspects," William R. Eyler, M.D., Detroit, Mich.; "Pediatric Aspects," William Silverman, M.D., New York, N. Y. Recorded: Kentucky State Meeting. Date: Sept. 19, 1962. Time: 1 hour, 25 minutes.

AEROSPACE MEDICINE

AM-12039 **AEROSPACE MEDICINE**—Stuart Bondurant, M.D., Indianapolis, introduction. Recorded: Indiana State Meeting. Date: Oct. 10, 1962. Time: 20 minutes.

AM-12040 **SPACE FLIGHT ECOLOGY**—John J. Konikoff, Missile and Space Vehicle Department, General Electric Co., Philadelphia, Penn. Recorded: Indiana State Meeting. Date: Oct. 9, 1962. Time: 50 minutes. ◄

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Thomas Alt, Neenah, Wis.

Robert W. Begley, 626 N. Lafayette Blvd., #1-D, South Bend 1.

Joseph P. Clawson, 2115 Grand, Butte, Mont.

Robert S. Kepner, 2661 Harcourt Dr., San Diego, Calif.

Alvin Wolfson, 41 Sherman Ct., New Haven, Conn.

George B. Pratt, 2364 Stieber, Wayne, Mich.

Rosendo A. Reyes, Bethesda General Hospital, 3655 Vista Ave., St. Louis, Mo.

Howard W. Short, USPHS Indian Hospital, Sells, Ariz. (available July, 1964)

John R. Tarr, Box D, Bridger, Mont.

SPECIALISTS

Riffat J. Morgan and Margaret E. Morgan, 411 Ellis St., Syracuse, N. Y.—*Anesthesiology*

Vicente S. Pallares, 5419 S. Harper, Chicago 5, Ill. —*Anesthesiology*

Martin S. Sternberg, 8761 S. W. 88th St., Miami, Fla.—*Internal Medicine-Gastroenterology*

Stanley E. Giarve, 6 Campus View Dr., Loudonville 11, N. Y.—*Internal Medicine*

William J. Norman, Ft. Harrison, Mont.—*Neurology*

Octavio M. Cortes, 2103 45th Ave., Long Island City 1, N. Y.—*Neuro-radiology*

Nicholas J. Manno, 1421 Berkman Ct., Rochester, Minn.—*Neurosurgery*

Warren F. Rogers, 3432 S. E. 33rd Ave., Apt. #2, Portland 2, Ore.—*Ob-Gyn*

Freedolph D. Anderson, 1882 Edison St., #2, Salt Lake City, Utah—*Ob-Gyn*

Donald O. Madsen, 922 B. Homestead Village, Rochester, Minn.—*Orthopedics*

Clifford W. Hogan, 303 Tenth Ave., Jamestown, North Dakota—*Orthopedic Surgery*

Yuksel A. Inankur, 826 Ebby Ave., Winnipeg 9, Manitoba, Canada—*Pediatries*

Neal E. Krupp, 1527 Fifth St. N. E., Rochester, Minn.—*Psychiatry*

Richard R. Nixon, 1423 Kraft, Munster, Ind.—*Radiology*

Robert J. Nichels, W. 171 N 8488 Allen Ave., Menomonee Falls, Wis.—*General Surgery*

Wesley J. Fernandez, 311 Harrell Dr., Lafayette, La.—*General Surgery*

Lon E. Curtis, 100 Goddard Ave., Brookline, Mass. —*General Surgery*

James H. Anderson, 4913 S. Keeler Ave., Chicago 32, Ill.—*General and Thoracic Surgery*

Charles H. Fortson, 117 South Main St., Dayton 2, Ohio—*General, Vascular and Chest Surgery*

Philip I. Wessling, 138 Shore St., Falmouth, Mass. —*General Surgery*

John M. Thomas, 517 N. Wilbur Ave., Sayre, Penn.—*General Surgery*

Harry C. Miller, 28 Fresno Rd., Rochester 23, N. Y. —*Urology*

Richard A. Graf, 534 Terrace Rd., Iowa City, Iowa —*Urology*

LOCATIONS

Blackford County—HARTFORD CITY—Population 8,056. Need for two to four young doctors. Six physicians in the town. Need for general practitioners, ear, nose and throat physician and surgeon. County hospital located in the town. For further details contact Glen B. Maple, Secretary, Hartford City Chamber of Commerce.

Clinton County—MULBERRY—Population 1,000 with a surrounding population of 2,000. Located 10 miles from Lafayette, home of Purdue University, and of two excellent, open staff hospitals. Ten miles from Frankfort, county seat, where the county hospital is located. Mulberry is located in a rich farming area of Indiana. Home and office available. Physician who has practiced there for several years is leaving for a residency. For details contact Mr. Eldon Skiles, Farmers' Bank, Mulberry.

Fulton County—LEITERS FORD—Merchants Association interested in obtaining a physician for this community which is located 13 miles west of Rochester where hospital facilities are available. Community willing to assist a physician in locating there. Contact Mr. Wayne Roe, Leiters Ford State Bank, Leiters Ford, Indiana.

Hamilton County — NOBLESVILLE — Population 8,000—located 20 miles northeast of Indianapolis. Ninety-bed county hospital located in the town. There is need for at least two general practitioners. Dr. Sam Campbell is leaving for a residency. His records are available. For further information contact Dr. Campbell, 88 S. 19th St., or Dr. J. C. Ambrose, 298 N. Ninth St., Noblesville.

Huntington County—HUNTINGTON—Population 16,000. Practice of Dr. T. W. Omstead, 229 Vine St., Huntington, available. Doctor Omstead does internal medicine with special attention to allergy. House available. Office, a three bedroom National Home, is available. Equipment available. Huntington has a 100-bed county hospital. In addition to Dr. Omstead's practice there is a need for another general practitioner and a pediatrician. Contact Dr. Omstead for further details.

Johnson County—MT. PLEASANT and SMITH VALLEY communities. Located in the northern part of Johnson County — eight miles from Franklin where hospital facilities are available. New office available or will build to suit the tenant. Northern Johnson county is one of the fastest growing areas in the state. For further

details contact Mr. Robert McDonald, R. R. 2, Morgantown Road, Greenwood, Indiana, or Mrs. James Wendling, R. R. 2, Box 191, Greenwood.

Morgan County — MOORESVILLE—Population between 4,000 to 5,000 with a large surrounding area with a population of 15,000. Located 16 miles from Indianapolis on Route 67. Hospitals available at Martinsville, Danville and Indianapolis. Two general practitioners located in the community at the present time. Fully equipped office of the late Dr. James Bivin is available. For further information contact Mrs. James Bivin, Indiana Road North, Mooresville, or Dr. Robert Van Bokkelen, Mooresville. ◄

"Reports of My Death Are Greatly Exaggerated"

We regret that the name of Dr. Emory D. Hamilton, Allen County physician, was included in the "Deaths of Indiana Physicians in 1962" listed in the June Yearbook issue of *The Journal*.

We are happy to report that Dr. Hamilton is very much alive.

Dr. Earl D. Hamilton, who did die on October 20th, was formerly a resident of Fort Wayne and in all probability was returned there for burial—hence the confusion over the names.

We regret any inconvenience and/or embarrassment caused by the error.

ABSTRACTS

BOOK REVIEWS

OCCUPANCY FIRE RECORD—HOMES FOR THE AGED

National Fire Protection Association, Boston, Mass., 1963, fully illustrated, 16 pages, 50 cents per copy.

Everyone who has responsibility for the administration of any building occupied by people should have a copy of the NFPA booklet which sets out the fire record for that particular type of building. Fire records are published for 40 different building types. Included are those for hospitals and for homes for the aged. "Homes for the Aged" is reviewed here to announce and call attention to the existence of the entire series.

The text and illustrations are as sobering as the sight of a severe auto accident. Seeing a bad road accident usually induces slower and more careful driving. Studying this booklet should improve the fire prevention program in any home for the aged. The same may be said for hospitals.

This booklet and others of its series, and numerous booklets on NFPA standards may be obtained by addressing the Association at 60 Batterymarch St., Boston 10, Mass.

FRANK B. RAMSEY, M.D.
Indianapolis

CANCER: DIAGNOSIS, TREATMENT, PROGNOSIS

Third edition. Lauren V. Ackerman, M.D., Juan A. del Regato, M.D. The C. V. Mosby Co., St. Louis, 1962. 1296 pages. $29.50.

Although written by a therapeutic radiologist and a surgical pathologist, *Cancer* is neither a reference book for details of radiologic technic nor of histopathologic descriptions. However, both surgeons and generalists who are concerned with the behavior, patterns of metastases, prognosis, and general principles of therapy of neoplastic disease will find this a valuable reference work.

The book is organized on the basis of descriptions of neoplasms of individual sites and organs with excellent descriptions and diagrams of lymphatic drainage. It is an excellent source for statistical data. The section on sarcomas of the soft tissues and leukemia are quite brief and except for Hodgkin's disease, the lymphomas are not included in any detail. Odontogenetic tumors are also omitted. But all-in-all, the questions which most



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clinicians ask about cancer are answered in this volume, and it is well worth the rather high purchase price.

JENE R. BENNETT, M.D.
South Bend

PATHOLOGY

Anderson, W. A. D., et al. Fourth edition, indexed. The C. V. Mosby Co., St. Louis, 1961. 1389 pages. $18.00.

The fourth edition of Anderson's *Pathology* continues to fulfill the objective of the previous editions of providing as thorough a coverage of the subject as possible in a single volume. This edition follows the same general outline as in previous volumes and utilizes over 30 authors, outstanding in their various fields of interest.

There has been a change of type from the third edition with the elimination of the small type used for presentation of the more detailed material. The type in the fourth edition is slightly smaller than the standard type used in the previous edition.

New chapters have been added on mesenchymal tumors and hypersensitivity diseases including the collagen diseases. The rather confusing group of mesenchymal tumors has been classified and described in an understandable and practical fashion. Recently described conditions such as nodular fasciitis are presented.

Throughout the text, the more recent histochemistry and electron microscopy knowledge has been introduced into the material where applicable.

The text remains an excellent source of information of human pathology for the student, pathologist and practicing physician.

JAMES J. SULLIVAN, M.D.
Indianapolis

BOYS IN WHITE—STUDENT CULTURE IN MEDICAL SCHOOL

Becker, H. S., Hughes, E. C., Geer, B., Struss, A. L. Univ. of Chicago Press, 1961. 443 pages. $10.00.

The authors present a quite detailed sociological study concerning the attitudes and perspectives of medical students at the University of Kansas School of Medicine. Their work was derived by recording and evaluating medical student comments and interview responses during a two-year period. During this time the authors attended classes and clerkship assignments with the students. The major periods of adjustment, i.e., the freshman year and the start of the clinical years, are explored at length—and the various student responses to these changes are explained.

Many other facets of the medical school community are presented. The role of medical fraternities is touched on briefly as is the function of the house staff in medical education. An interesting section deals with the factors that influence the new graduates' decision regarding entering

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solo or group practice and the choice of specialty practice versus general practice. The authors conclude with a chapter which attempts to evaluate the degree of idealism that senior students have as compared with freshman students. Fortunately, it appears that the seniors have not become hardened and lost their idealism in the four years. This refutes the charge made at times about young physicians.

There are actually few surprises for physicians to be found in this book, and it should have a relatively small potential market. Departmental Chairmen, particularly in the Clinical Departments, can profit by learning what image their specialty presents to the students. Physicians who have a deep interest in medical education will find it interesting and moderately informative.

The book is well done mechanically and is easy to read but it is quite long and repetitious in places. It would have been more appealing if it had been at least 100 pages shorter.

JACK W. HICKMAN, M.D.
Indianapolis

Abstracts From Various Literature, Prepared by AMA

BACTERIAL CONTAMINATION OF OXYGEN USED CLINICALLY

Standard bacteriologic sampling and culturing technics have demonstrated conclusively that viable bacteria exist in oxygen used clinically. Bacteria cultured from medical oxygen supplies comprise the common airborne contaminants. An efficient small, inexpensive, reliable sterilizing filter has been developed which can be inserted into the oxygen line and will effectively sterilize oxygen at flow rates up to 15 liters per min.

Mortenson, J. D., Hurd, G., Hill, G.: Bacterial Contamination of Oxygen Used Clinically: Importance and One Method of Control, *Dis. Chest* 42: 567 (Dec.), 1962.

ACCIDENTAL LOSS OF A PLASTIC TUBE INTO VENOUS SYSTEM

A plastic tube was lost into the venous system following its use for ordinary prolonged intravenous therapy. This accident sounds a warning to the dangers of a seemingly innocuous and common procedure. Three similar local accidents are recounted with eight others already in the literature. Of 11 patients where "lost tubes" were not recovered, four are living and well (two of these after operative removal). The remaining patients are all dead; in five of these death was considered a result of the infected intravascular tube which usually lodges against the annulus of the tricuspid ring.

Taylor, F. W., Rutherford, C. A.: Accidental Loss of a Plastic Tube into Venous System, *Arch. Surg.* 86:177 (Feb.), 1963.

SPLENECTOMY AND IMMUNITY

The question of whether or not splenectomy increases the infection rate in children was investigated in three groups, one composed of 73 splenectomized children, the second composed of 56 normal controls, and the third of 61 children with illnesses comparable to the condition in the splenectomized group. The results indicate that the increase in the incidence of infection is probably related to the underlying disease, not to the splenectomy.

Thurman, W. G.: Splenectomy and Immunity, *Amer. J. Dis. Child.* 105:138, (Feb.) 1963.

WOUND SEPSIS AND OPERATING-LIST ORDER

A hitherto undescribed association is reported in "clean" surgical cases between high sepsis-rate and late position on the operating list. The association might be the result of artifact, fatigue, or operating-theater contamination. Further studies are necessary to investigate these possibilities. No association was found in clean cases between high sepsis-rate and duration of operation, wound length or drainage, or advanced age.

Stewart, J. S. S.: Wound Sepsis and Operating-List Order, *Lancet* (London) 2:1065, (Nov. 24) 1962.

DEATH RATES AMONG ACTIVE AND SEDENTARY EMPLOYEES

Investigations have indicated that men in sedentary occupations are more liable to have coronary heart disease than those in occupations requiring moderate to heavy physical activity. To test this hypothesis a study was made of the death rates among clerks, switchmen, and section men employed in the railroad industry. A total of 85,112 man-years of clerks, 61,630 man-years of switchmen, and 44,867 man-years of section men were studied. Age adjusted rates for all deaths were found to be 11.83 per 1,000 per year for clerks, 10.29 for switchmen, and 7.62 for section men. The age-adjusted rates for deaths ascribed to arteriosclerotic heart disease were found to be 5.7 per 1,000 for clerks, 3.9 for switchmen, and 2.8 for section men. This shows that the results were consistent with the hypothesis that men in sedentary occupations have more coronary heart disease than those in occupations requiring moderate to heavy physical activity.

Taylor, H. L., Klepetar, E., Keys, A., Parlin, W., Blackburn, H., Puchner, T.: Death Rates Among Physically Active and Sedentary Employees of the Railroad Industry. *Amer. J. Public Health* 52: 1697, (Oct.) 1962.

POSTOPERATIVE SEPSIS IN A SMALL SURGICAL UNIT

Possible sources of operative wound infection are many but include contagion from the patient himself and from the surgical team. A series of 100 operations performed in a single isolated surgical unit by two surgeons was reviewed. In all cases, skin preparation was with tincture of merthiolate applied three times in the 24 hours preceding operation. Swabs of the skin of the patient before, at the end of operation, and at removal of sutures were examined and also swabs from the hands and noses of the surgical team. Although on every occasion there was at least one potential source of staphylococcic infection in the operation theater and one surgeon was a staphylococcic nasal carrier, throughout the series, no case of infection traceable to either source was noted. There were four cases of infection, and in each case technical reasons such as poor skin nutrition and hematoma formation accounted for infection. The source of the infecting organism was not the surgical team.

Litton, A., Sinclair, R. D. C.: Postoperative Sepsis in a Small Surgical Unit, *Lancet* (London) 1:132, (Jan. 19) 1963.

QUINIDINE THERAPY OF CHRONIC AURICULAR FIBRILLATION

Quinidine therapy was given to 274 unselected patients with chronic auricular fibrillation. Sinus rhythm was restored in 47% of the cases. The main risk was sudden loss of consciousness, which occurred in 12 patients, and was due to various cardiac arrhythmias or respiratory depression. The reactions were usually of short duration, and all patients recovered. Treatment should start immediately with artificial respiration and, if needed, closed chest cardiac massage. In the authors' experience the administration of isoproterenol (Isuprel) sublingually was valuable during bradycardia or ventricular arrhythmias, and ephedrine, given intramuscularly, was effective when the blood pressure fell.

Rokseth, R., Storstein, O.: Quinidine Therapy of Chronic Auricular Fibrillation, *Arch. Intern. Med.* 111:184, (Feb.) 1963.

DETERMINE THE SEX WITH THE AID OF THE SEX CHROMATIN DETERMINATION OR BY THE CULTURE OF CHROMOSOMES

Any physician may be confronted with the necessity of making a decision on the sex of a subject, and so he should know in what cases he should have a search made for the sex chromatin or in which chromosome culture should be carried out. Reviewing the literature on sex chromatin studies, he mentions as characteristics of females, Barr's bodies on the inner membrane of the cellular nucleus and Davidson's "drumsticks" in the nuclei of segmented leukocytes. He reports results of sex chromatin studies he made on specimens of oral epithelium and blood smears from 300 subjects submitted to him for sex identification and of serial studies made on 7000 newborn infants. Both the normal forms and abnormalities of the sex chromatin are discussed. Findings on the chromosomes of Mongolian idiots are mentioned, although these are not concerned with the sex chromatin (in chromosome pair 23), but rather with chromosome pair 21. Investigation of the sex chromatin is indicated in all cases of suspected Turner's (genital dwarfism) syndrome, Klinefelter's (gynecomastia and aspermatogenesis) syndrome, testicular feminization, adrenogenital syndrome, pseudohermaphroditism, and the triple X female. The use of chromosome cultures is not suitable for routine investigation.

Bergemann, E.: When is it Advisable to Determine the Sex with the Aid of the Sex Chromatin Determination or by the Culture of Chromosomes, *Schweiz Med. Wschr.* 92:1253, (Oct. 13) 1962.

SEVERE DEAFNESS FOLLOWING NEOMYCIN

An 18-month-old baby girl, whose father had a history of acoustic trauma, became severely deafened after ingestion of a compound of Kaopectate with neomycin. The total amount of neomycin taken was computed to be less than two gm. The presence of serous otitis media in association with adenotonsillar infection proved to be a coincidence. The presence of a family history of deafness or

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susceptible acoustic nerves, or both, warrants extraordinary caution in the oral administration of neomycin. This agent is commonly used in the treatment of enteritis; such patients should have careful observations of auditory acuity and any impairment should call for withdrawal of the drug. Since hearing loss in the reported case did not become apparent until a week after treatment had ended, the presence of detectable quantities of circulating neomycin would be a more reliable index of imminent audiotoxicity.

King, J. T.: Severe Deafness in Infant Following Oral Administration of Neomycin. *J. Med. Assn. Georgia* 51:530, (Nov.) 1962.

HEPARIN TREATMENT OF BLEEDING

Three cases of severe bleeding, treated with heparin, are reported. The bleeding was thought to be due to increased fibrinolytic activity, secondary to hypercoagulability, which was diagnosed in the following way: the patients had a markedly shortened coagulation time (measured in plastic tubes) and a short plasma recalcification time. Related to these findings was a markedly increased antihemophilic factor activity, the only coagulation factor abnormality detected. In order to restore coagulation to normal values, heparin treatment was tried. It was found that heparin had the expected normalizing effect upon the hypercoagulability, and, simultaneously with this, the abnormal fibrinolysis was found to disappear. Two of the patients reported here stopped bleeding within 15 minutes after a heparin dose of 100 mg.

von Francken, I., Johansson, L., Olsson, P., Zetterqvist, E.: Heparin Treatment of Bleeding, *Lancet* (London) 1:70, (Jan. 12) 1963.

CHROMOSOMAL ABNORMALITIES

When human chromosome anomalies were first described in 1959, it appeared that specific abnormalities might be correlated with specific syndromes. Mongolism and the D and E syndromes are examples of specific syndromes associated with the presence of an extra autosome. Klinefelter's syndrome may be associated with a variety of different sex chromosome anomalies, including XXY, XXYY, XXXY, and XXXXY. The last named variant is the only one which frequently presents features distinguishing it from the others. An XO sex chromosome complex is found in many women with gonadal dysgenesis. However, a variety of mosaicisms have been described in association with this condition, including XO/XX, XO/XXX, XO/XX/XXX, XO/XY, and XO/XYY. Two families are described in which chromosome anomalies were found, but the association with defects was irregular. In one family the abnormality involved one of the Number 16 chromosomes and in the other it involved one of the small acrocentric chromosomes.

Carr, D. H.: Chromosomal Abnormalities and Their Relations to Disease, *Canad. Med. Ass. J.* 88: 456, (March 2) 1963. ◄

SCIENTIFIC EXHIBIT APPLICATION FORM

Committee on Scientific Exhibits
Indiana State Medical Association
3935 N. Meridian Street
Indianapolis 8, Indiana

Please send me an application form for a Scientific Exhibit at the ISMA Annual Convention, October 15-17, 1963, Murat Temple, Indianapolis, Indiana.

I propose to exhibit_____

Name_____

Address_____

City_____

State_____

INDIANA STATE BOARD OF HEALTH

Monthly Report—May 1963

Disease	May 1963	Apr. 1963	Mar. 1963	May 1962	May 1961
Animal Bites	1029	890	421	1234	806
Chickenpox	758	658	786	576	602
Conjunctivitis	77	87	94	131	126
Diphtheria	0	0	2	0	0
Dysentery, Unspecified	111	60	95	65	26
Gonorrhea	233	228	220	Not Available	
Impetigo	75	64	74	110	61
Infectious Hepatitis	81	52	62	141	247
Infectious Mononucleosis	31	23	41	80	29
Influenza	240	959	16934	646	333
Measles (Rubeola-Rubella)	1556	1176	847	2140	1093
Meningitis, Meningococcal	3	3	3	1	4
Meningitis, Other	12	9	10	3	15
Mumps	519	370	381	603	1112
Pertussis	29	13	37	25	2
Pneumonia	154	197	501	306	136
Poliomyelitis	1	0	0	0	1
Streptococcal Infections	565	582	325	592	465
Syphilis—Primary and Secondary	6	5	3	Not Available	
All Other Syphilis	111	100	83	Not Available	
Tinea Capitis	8	2	6	16	13
Tuberculosis (Active)	193	161	106	119	Not Available

★

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Joseph E. Palmer, Administrative Assistant, Resigns for New Post

Mr. Joseph E. Palmer, administrative assistant of the ISMA, left the Association July 1 to assume a similar position with the Indiana Hospital Association.

Mr. Palmer will be missed by all the members of ISMA and by the headquarters staff. But the ISMA's loss will be the IHA's gain.

Public Health Service Grants $23,000 for Aged Study at I. U.

Indiana's leadership in the improvement of nursing home care has been recognized by the U. S. Public Health Service through a $23,000 matching grant to the Indiana University Medical Center for development of educational and research programs in the care of the aged and chronically ill.

This new project in which the medical center will have the cooperation of the Indiana State Board of Health and the Indiana Association of Licensed Nursing Homes will be under the supervision of Edmund J. Shea, medical center administrator. Harry T. Latham, Jr., attorney for the nursing home organization, will be the assistant administrator and Donald E. Smith will be the executive director. Offices will be located at the medical center.

Dr. Jones Named to AMA Council

Dr. Eli S. Jones, Hammond, has been elected as vice-chairman of the AMA Council on Occupational Health. Dr. Jones will also serve on the council's Executive Committee.

"High Cost of Drugs" Displays Available for Waiting Rooms

Glossy reproductions of two public education advertisements published by the Pharmaceutical Manufacturers Association, for display in physicians' waiting rooms, are available free of cost from the association. They are mounted on heavy cardboard and fitted with an easel.

One features the picture of an old cemetery and is captioned "They never even had a chance to complain about the cost of drugs." The other pictures a mastoid scar and explains in the text that mastoiditis is a rare disease since the advent of antibiotics; and that even when it costs as much as $15 for the medicine, many operations and considerable mortality has been avoided.

Address the Pharmaceutical Manufacturers Association at 1411 K Street, N. W., Washington, D. C.

Dr. Snively Honored for Paper

Dr. W. D. Snively, Jr., Evansville, was named by the American Academy of General Practice as recipient this year of one of its $1,000 Ross Awards. The award is made for distinguished scientific writing.

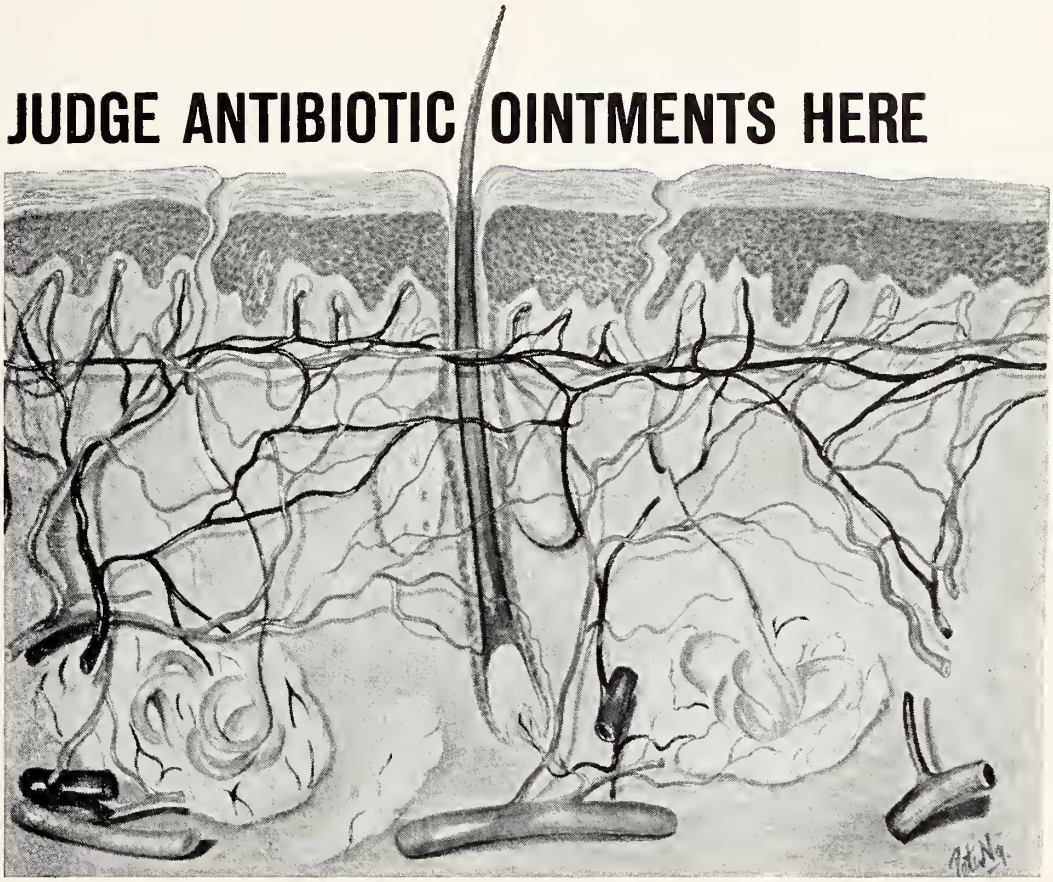
Dr. Snively was honored for his articles on fluids and electrolytes. He previously received an award by the American Science Writers Association for the same activity.

Indiana Physicians Win Honors In SAMA Medical Art Competition

Medical art competition at the annual meeting of the Student American Medical Association this year produced winners in three categories (medical photography, photomicrography and medical illustration). This was the fifth such competition, open heretofore solely to medical students, interns and residents. This year for the first

Continued

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Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

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time it was also open to professional medical illustrators.

This year Louis F. Romain, M.D., of I. U. School of Medicine, Bloomington, received First Honorable Mention for his photomicrography of Myeloma Kidney. Robert F. Albright of Marion County General Hospital, Indianapolis, received First Honorable Mention in the Professional Medical Photography category for his work on Carcinoma of the Palate.

The program and its cash awards and trophies are sponsored by Eaton Laboratories. Following the meeting the exhibit of entries will visit medical schools and hospitals. Requests for showings should be directed to the Executive Director, SAMA, 333 N. Michigan Ave., Chicago, 1.

Dr. Mead Honored for Service

Dr. Clarence H. Mead, Bluffton, was presented a plaque by the Wells County Medical Society "in testimonial of sincere appreciation in recognition of his service for this community and the medical profession."

The presentation took place on the occasion of the Wells County science lecture on April 15. Dr. Mead has been a member of his county society for 55 years. He became a member of the ISMA 50-year Club in 1958.

Memorial Clinic Now Accredited

The Memorial Clinic, 3202 N. Meridian Street, Indianapolis, has been granted accreditation by the Joint Commission on Accreditation of Hospitals. The clinic, opened in 1956, has 42 hospital beds.

Dr. Milos Traveling with Exhibit

Dr. Robert J. Milos, Gary, is a member of the staff of the United States Information Agency exhibit "Medicine USA" which opened in Zagreb, Yugoslavia and then moved to Belgrade in May and June. The staff includes six doctors, three dentists and two pharmacists.

Clinical Center Study of Chronic Myelogenous Leukemia Needs Referrals

The cooperation of physicians is requested in a study of chronic myelogenous leukemia being conducted by the Chemotherapy Service of the National Cancer Institute at the Clinical Center, National Institutes of Health, Bethesda, Maryland.

Referrals of patients with chronic myelogenous leukemia are needed. Particularly needed are those in the 20 to 40 year age group with high white blood cell counts and platelet counts, for studies of newer chemotherapeutic agents and as a source of white cells and platelets for *in vitro* and *in vivo* study.

Physicians who wish to have their patients considered for the study may write or telephone: Dr. Paul P. Carbone, Chemotherapy Service, Medicine Branch, National Cancer Institute, Bethesda 14, Maryland.

Tennessee State Medical Assn. Changes Name, but "Goals Remain the Same"

The Tennessee State Medical Association has decided to change its name. Henceforth it will be called the Tennessee Medical Association.

The Association is now over 133 years old. Their motto for the change was "The name has been changed but our goals remain the same."

Dr. Reed Elected to New Post

Dr. Philip B. Reed, chairman of the Grievance Committee of ISMA has been voted speaker-elect of the Assembly of District Branches of the American Psychiatric Association. The APA Assembly is somewhat comparable to the AMA House of Delegates with 8,000 psychiatrists in 49 states and five Canadian provinces represented out of the 13,000 total APA membership.

Dr. Earl W. Mericle, former president of ISMA, succeeded Dr. Reed as delegate for the Indiana District Branch with Dr. Ernest Fogel, Logansport as his alternate. The Northern Indiana District Branch delegate to the assembly is Dr. Grant Metcalfe, South Bend; alternate is Dr. Theodore Hill, also of South Bend.

AMA To Publish Film Catalogue

The AMA is publishing an indexed catalog listing more than 4,000 medical motion pictures.

The catalog will include a brief summary, running time, authors, etc., and will give the primary rental source. The publication will be ready later this year and will be available to medical societies, nursing organizations and hospitals.

Physicians Named as Fellows

The American College of Physicians have announced the election of Dr. John H. Mader of Richmond and of Dr. Robert L. Rudesill of Indianapolis as Fellows of the College. Selected as Associates were Dr. John L. Cullison of Muncie and Dr. David A. Giordano of Indianapolis.

Leukemia Pamphlet for Parents Available Free to ISMA Physicians

"Childhood Leukemia—A Pamphlet for Parents," prepared for distribution by physicians to parents of leukemic children, has just been released by the National Cancer Institute, Public Health Service, Department of Health, Education and Welfare.

Material for the pamphlet was drawn from a two-year joint project of the National Cancer Institute and the National Institute of Mental Health which involved the study of the psychological and physiological adaptations to chronic stress of parents of children hospitalized for leukemia at the Clinical Center of the National Institutes of Health.

Copies of "Childhood Leukemia—A Pamphlet for Parents," are available to *physicians only*, free of charge, from the Office of Information and Publications, National Cancer Institute, Bethesda 14, Maryland.

Dr. Jones Gets AMA Appointment

Dr. Eli S. Jones, Hammond, has been appointed as a member of the AMA Committee on Social Security and Workmen's Compensation.

Medico Environs Names Officers

Medico Environs Hospital, 3350 S. Carson Avenue, has named L. Christian Moore, former administrator of Winslow Memorial Hospital in Arizona, as director of medical and administrative services. Mrs. Pauline Pennick has been named director of nursing services and Mr. Dallas Swank has been appointed general office manager.



ONE OF THE TWO Honoroble Mention citations given by the AMA at the 14th National Science Foir wos won by Rheo Louise Keller, 17, a junior ot New Hoven High School, New Hoven, Indiano. Her citotion, presented by Dr. George M. Fister, AMA President, wos for her study of "Subcutaneous Induction of Malignont Melonomo in the Syrian Homster with Cell-Free Extrocts." It wos on investigotion of the role of viruses in the formation of neoplasms. The Notionol Science Foir brings together 400 finalists who have survived regionol ond state competition omong 1,000,000 exhibitors.

Medico Environs was licensed as a specialized hospital for acute and chronic diseases by the Indiana State Board of Health in April. The license permits the hospital to treat and diagnose sudden illness requiring immediate attention.

Three Hoosiers Back From Tour

Three Hoosiers have just returned to the United States after a tour of duty on board the hospital ship S. S. Hope. The ship returned from its anchorage off Peru in South America in April after a 10-month mission.

Dr. Francis G. Zeier, Welborn Clinic, Evansville, Dr. Arthur Baptisti, Jr., Indianapolis, and Miss Ann Roden, R.N., of South Bend, represented Indiana on this most recent cruise. It was the second tour for Miss Roden.

Elected to SAMA Post

Duke D. Fisher, a junior at Indiana University School of Medicine, was elected Vice-President of the Student American Medical Association at the annual meeting held in May. ◄

FUTURE MEETINGS, SEMINARS, COURSES

Laryngology, Bronchoesophagology Course Offered September 16-28

The Department of Otolaryngology, University of Illinois College of Medicine, will conduct a postgraduate course in Laryngology and Bronchoesophagology, September 16-28, under the direction of Paul H. Holinger, M.D.

Registration will be limited to fifteen physicians who will receive instruction by means of animal demonstrations and practice in bronchoscopy and esophagoscopy, diagnostic and surgical clinics, as well as didactic lectures.

Interested registrants will please write directly to the Department of Otolaryngology, University of Illinois College of Medicine, 1853 W. Polk Street, Chicago 12, Ill.

ISMA Members Invited to American Cancer Society Scientific Session

The American Cancer Society will hold its annual Scientific Session at the Biltmore Hotel in New York City on October 21 and 22.

The program will consist of a symposium on "Unusual Forms and Aspects of Cancer in Man." All physicians are invited to attend. Further details and copies of the program may be obtained by writing Roald N. Grant, M.D., 521 W. 57th St., New York, 19.

Gastroenterology Postgrad Course Offered Oct. 24-26 in Washington

The American College of Gastroenterology will conduct its annual Postgraduate Course in Gastroenterology at the Shoreham Hotel in Washington, D. C. on the 24, 25 and 26 of October.

Details may be obtained by writing the college at 33 W. 60th St., New York, 23.

AMA Occupational Health Congress To Be in San Francisco This Year

The National Congress on Occupational Health will be held by the AMA in San Francisco, next September 25 and 26. The theme of the meeting will be "America's Best Resource—the Healthy Worker."

Afterwards there will be a two-day meeting of the Western Industrial Health Conference. Complete information may be obtained by writing the Council on Occupational Health, AMA, 535 N. Dearborn, Chicago, 10.

Annual Midwest Allergy Forum Set for October 12-13 in Cleveland

The annual meeting of The Midwest Allergy Forum will be held at The Sheraton-Cleveland Hotel, Public Square, Cleveland, Ohio, October 12th and 13th.

The scientific sessions will include panels on chronic pulmonary problems, cutaneous diseases, repository methods of therapy and many other problems of clinical allergy.

For further information write to: I. M. Hinnant, M.D., General Chairman, 10465 Carnegie Ave., Cleveland 6.

Toxicological Information Course Will be in New York October 14-18

A five-day course in "Sources and Use of Toxicological Information" will be presented by the Institute of Industrial Medicine, New York University Medical Center, in cooperation with the American Industrial Hygiene Association October 14 through 18. The course will be given at the Onchiota Conference Center, Tuxedo, New York, near the new University Valley campus of New York University.

Inquiries for additional information should be addressed to: Institute of Industrial Medicine, New York University Medical Center, 550 First Ave., New York 16. ◄

(One of a series of ads being used in key Hoosier newspapers)



A person's fear of hospital and doctor bills is often close to the fear of illness itself. This is especially true in these days of medical miracles that cost a lot of money. Best protection is a Blue Cross-Blue Shield membership. You get personalized benefits—help in terms of the actual hospital care you need, and realistic allowances for your doctor. Ask your employer about joining Blue Cross-Blue Shield.

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County, District News

Second District

New president of the Second District is Dr. Paul Arbogast, Vincennes. Dr. J. S. Brown, Carlisle, was re-elected secretary-treasurer, and Dr. E. T. Edwards, Vincennes, was re-elected councilor. The 1964 meeting will be held in Vincennes.

Third District

Dr. George M. Wolverton, Clarksville, is the new president of the Third District. He will appoint a secretary-treasurer. The 1964 meeting will be May 20 in Jeffersonville.

Fourth District

Newly elected president of the Fourth District is Dr. William Shaffer, Greensburg. Assisting him will be Drs. Forrest D. Ellis, North Vernon, vice-president and James C. Miller, Greensburg, secretary-treasurer. Dr. J. M. Black, Seymour, was re-elected to the Blue Shield board in other action. The 1964 meeting has been set for May 20 in Greensburg.

Sixth District

Dr. Perry F. Seal, Brookville, will head the Sixth District for the coming year. Other newly elected officers are Drs. Charles H. Loomis, Richmond, vice-president and William E. Murray, New Castle, secretary-treasurer. Dr. Frank Green, Rushville, was elected alternate councilor. The 1964 meeting will be held in New Castle.

Seventh District

Dr. Joseph F. Ferrara, Franklin, is the new president of the Seventh District; Dr. Albert Donato, Indianapolis, vice-president; Dr. James H. Gosman, Indianapolis, secretary-treasurer and Dr. Charles Jones, Franklin, alternate councilor. Dr. Glen V. Ryan was elected Blue Shield board member.

Eighth District

Dr. William L. Baughn, Anderson, is the newly elected president of the Eighth District. Assisting him will be Drs. Robert D. Williams, secretary-treasurer, Markleville; Donald R. Taylor, Muncie, councilor and Paul W. Sparks, Winchester, alternate councilor. The 1964 meeting will be in June in Anderson.

Tenth District

A movie and speakers on the topic of the "disturbed patient" highlighted the May 15th meeting of the Tenth District Medical Society. Superior Court Judge Fred Egan, and Drs. David C. English, Jackson, Mich., and Robert S. Daniels, Chicago, discussed the legal rights and medical aspects of treating this type of patient. Attorney Robert Lucas, co-author of the Corporate Practice Act, discussed "What this New Law Offers Doctors—as Groups and as Individuals."

Eleventh District

The Eleventh District met May 22 in Delphi. Dr. Eugene S. Rifner was re-elected councilor. Other officers will be elected at the fall meeting of the group, tentatively set for Sept. 17 in Grant County.

Twelfth District

Newly chosen president of the Twelfth District is Dr. Donald G. Mason, Angola. Other new officers are Drs. C. A. Novy, Garrett, vice-president and M. E. Priddy, Fort Wayne, secretary-treasurer. The 1964 meeting was set for May 20 in Fort Wayne.

Allen

New officers of the Allen County Medical Society were elected at the May meeting. Leading the group this year will be Drs. Francis L. Land, president; Mahlon F. Miller, vice-president; and Donald M. Hickman, treasurer. All of the officers are from Fort Wayne. Delegates will be Drs. F. A. Bryan, J. Robert Ball and Richard B. Juergens; alternates, Drs. Walter T. Jurgensen, Gerald R. Nolan, Robert L. Hillery and J. E. Krueger.

Carroll

Field Secretary Howard Grindstaff attended the April 17 meeting of the Carroll County Medical Society to give a legislative report. The local society made plans for the district meeting.

Cass

"Medical Care for the Aged" was the topic of a high school debate team which attended the May 6 meeting of the Cass

Continued



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1. A sprain or fracture is not a big clinical problem—but it does hurt. And if there is housework to do and kids to mind, the patient needs something to numb the pain.

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3. 'Soma' Compound is ideal in these cases. Since it contains both 'Soma' (carisoprodol) and acetophenetidin it is both a potent analgesic and a superior muscle relaxant; it also contains caffeine to offset any drowsiness *("numbs the pain... not the patient").*

4. Why not try 'Soma' Compound? Dosage is 1 or 2 tablets q.i.d. For more severe pain, try 'Soma' Compound + Codeine. Dosage: 1 or 2 tablets q.i.d.

5. Hypersensitivity to carisoprodol may occur rarely. Codeine may produce addiction, nausea, vomiting, constipation or miosis.

Soma® Compound

carisoprodol 200 mg., acetophenetidin 160 mg., caffeine 32 mg.

Soma® Compound + Codeine

carisoprodol 200 mg., acetophenetidin 160 mg., caffeine 32 mg., codeine phosphate 16 mg. (Warning—may be habit forming.)

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County Medical Society. There were 26 members present.

Clay

Field Secretary Robert Amick discussed bills which passed in the state legislature this year with the Clay County Medical Society April 16. Nine members attended the meeting.

Clinton

Dr. Williams, a hospital radiologist, spoke on "Radioactive Isotopes" before the Clinton County Medical Society meeting April 23. Twelve members attended.

Decatur

Eight members attended the May 17 meeting of the Decatur County Medical Society to hear Field Secretary Amick give a legislative report.

Delaware-Blackford

Sixty members attended the April 16 meeting of the Delaware-Blackford County Medical Society meeting in Muncie. The board of trustees of Ball Memorial Hospital were present to discuss a new expansion program.

Elkhart

Mr. John Buckley, of Miles Laboratories, reported on "What the New Food and Drug Act Means to the Average Physician" before the April 4 meeting of the Elkhart County Medical Society. There were 48 members present.

Fayette-Franklin

"Diabetes in Pregnancy" was the topic of Dr. Robert Burket, associate professor of obstetrics at the University of Cincinnati, when he spoke May 14 before the 15 members of the Fayette-Franklin County Medical Society.

Floyd

Dr. MacHenry Brewer discussed "Primary Aldosteronism" before the April 18 meeting of the Floyd County Medical Society. There were 24 members present.

Hancock

"Freezing of the Stomach for Surgery" was the title of a talk by Dr. J. S. McElroy when he spoke before ten members of the Hancock County Medical Society present at the May 27 meeting.

Henry

Attorney Fred Hall discussed "Trustees and Medical Care" before the May 16 meeting of the Henry County Medical Society. There were 23 members attending.

Harrison-Crawford

Dr. David Dukes is the newly elected president of the Harrison-Crawford County Medical Society. Dr. Richard A. Jordan was elected vice-president and Dr. Samuel Martin, secretary-treasurer. All of the new officers are from Corydon.

Jay

Dr. Donald E. Spahr, Portland, is the new president of the Jay County Medical Society. Dr. Joseph Vormohr is secretary.

Jefferson-Switzerland

A cardiac defibrillator was demonstrated to the 17 members of the Jefferson-Switzerland County Medical Society present at the May 14 meeting.

Johnson

Newly elected president of the Johnson County Medical Society is Dr. Hugh K. Andrews, Franklin. Assisting him will be Dr. Charles W. Link, Jr., Greenwood, secretary-treasurer.

Knox

Dr. M. L. Curtner has been elected president of the Knox County Medical Society with Dr. Richard Stein, vice-president; Dr. Thomas Barrett, secretary-treasurer and V. C. McMahan as delegate.

Montgomery

Dr. Merrell Grayson spoke on the "Indiana University Eye Bank and Its Function" before the May 16 meeting of the Montgomery County Medical Society. There were 17 members present.

Morgan

Dr. David Eisenberg, Martinsville, is the new president of the Morgan County Medical Society. Dr. Robert J. Miller, Paragon, is secretary-treasurer.

Owen-Monroe

There were 49 members attending the April 25 meeting of the Owen-Monroe County Medical Society. A film on "External Cardiac Massage" was featured.

St. Joseph

Field Secretary Grindstaff showed the Annis film "Operation Hometown" and urged action on getting the program set up at the May 14 meeting of the St. Joseph County Medical Society.

Scott

Drs. Marvin McClain and James A. Sabens have been re-elected president and secretary respectively of the Scott County Medical Society.

Shelby

Drs. H. H. and P. M. Inlow talked on the "Roentgen Interpretations of the Chest" at the May 1 meeting of the Shelby County Medical Society. Fifteen members attended.

Tippecanoe

A film entitled "A Cry for Help" from the Mental Health Association was shown at the April 9 meeting of the Tippecanoe County Medical Society. There were 46 members present.

Wabash

New officers for the Wabash County Medical Society are: Drs. William Boaz, Wabash, president, Paul Eiler, North Manchester, vice-president and Christos Gatzimos, Logansport, secretary-treasurer. ◄

A limited quantity of June issues and 1963-64 Rosters are available at the JOURNAL Office, 3935 N. Meridian, Indianapolis 8. Place your order now.

Roster: $3.00 each.

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Chelated Iron PLUS 4 Chelated Minerals • High Therapeutic Effectiveness • Less Irritation — even on empty stomach • No Tooth Stain • Less Toxic • B-Vitamins for Added Hemopoietic Activity • Pleasant Flavor • Economical

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FORMULA —

Each 5 cc. (one teaspoonful) contains:

Iron (as Ferrous Betaine Citrate)	30 mg.
Cobalt (as Cobaltous Betaine Citrate)	0.1 mg.
Manganese (as Manganese Betaine Citrate)	1.0 mg.
Zinc (as Zinc Betaine Citrate)	1.25 mg.
Magnesium (as Magnesium Betaine Citrate)	6.0 mg.
Vitamin B-1	1.5 mg.
Vitamin B-2	1.2 mg.
Vitamin B-12	6.0 mcg.
Niacinamide	10 mg.
Panthenol	10 mg.

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Deaths

Just prior to this issue going to press, the Association was saddened to learn of the sudden death of Harry R. Stimson, M.D., of Gary. A tribute to Dr. Stimson, a past president of the Association, will appear in the August issue of *The Journal*.

Herbert W. Detrick, M.D.

Dr. Herbert Wellman Detrick, 75, former head of the medical staff at St. Margaret Hospital in Hammond, died April 12 in Cooper Hospital, Camden, N. J.

Dr. Detrick, an urology specialist, headed the medical staff at St. Margaret Hospital for 16 years until he retired 10 years ago. He was a past president of both the Lake County and the Hammond Medical Societies and was a member of the ISMA 50-Year Club.



...THEY CAN WALK AGAIN

• Torpedoed on the Murmansk run —nearly frozen to death in an open boat—both legs lost below the knee—ex-Merchant Marines Michael McCormick and William Morris walked unaided in three weeks. They could look forward with certainty to leading a normal life again. To these men, as to thousands of other Hanger wearers, the phrase "Hanger is a symbol of help and hope" is a concrete truth proven by every day of their future lives.

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Michael Kalavros, M.D.

Dr. Michael Kalavros, a Gary physician for 41 years, died May 11 after a short illness. He was 73.

Philip L. Franklin, M.D.

Dr. Philip L. Franklin, 51, former head of the psychiatric clinic of the Lake County Department of Public Welfare, died May 19 at Methodist Hospital in Gary.

Dr. Franklin came to Indiana in 1940 from the Colorado State Hospital at Denver where he was a staff psychiatrist. He served as consultant to the Indiana State Department of Public Welfare for one year and then became clinic director when the Lake County Mental Health Clinic was expanded. He entered private practice in 1946.

Joseph E. Lang, M.D.

Dr. Joseph E. Lang, South Bend physician, died April 30 in St. Joseph's Hospital. He had collapsed April 22 while making his rounds at the hospital.

A graduate of the I. U. Medical School, Dr. Lang had served as president of the St. Joseph Hospital staff and had just recently been recognized for his use of the stomach-freezing treatment of ulcers. He had successfully carried out the treatment in South Bend. He was a member of the St. Joseph County Medical Society.

Faye O. Schenck, M.D.

Dr. Faye O. Schenck, long-time Montgomery County physician, died April 6.

The retired physician, who also operated a large farm, was 84. He was a graduate of the Medical College of Indiana in 1905 and a member of the ISMA 50-Year Club.

Dulania S. Wiggins, M.D.

Dr. Dulania S. Wiggins, Senior Member and member of the ISMA 50-Year Club, died April 4 at his home in New Castle. He was 88.

Dr. Wiggins was a native of Losantville and practiced medicine there for 12 years before coming to New Castle in 1908. He was a member of the Henry County Medical Society. ◄

Annual Meeting Dates of Professional Medical and Allied Organizations

INDIANA STATE SOCIETY OF ANESTHESIOLOGISTS
Date May, 1964
Place Indianapolis

BONE AND JOINT CLUB
Date October 16
Place The Athenaeum, Indianapolis

INDIANA ACADEMY OF GENERAL PRACTICE
Date March 11-12, 1964
Place Murat Temple, Indianapolis

INDIANA NEUROPSYCHIATRIC ASSOCIATION
Date Second Wednesday of every month, October through May
Place The Athenaeum, Indianapolis

INDIANA OBSTETRICAL AND GYNECOLOGICAL SOCIETY
Fall Meeting
Date November 13
Place Marott Hotel
Annual Meeting
Date January 15, 1964
Place Marott Hotel

INDIANA ASSOCIATION OF PATHOLOGISTS
Date Dec. 1, 1963
Place Methodist Hospital
Fall Scientific Meeting
Date Sept. 21-22, 1963
Place I.U. Medical Center
Annual Seminar
Date May 17, 1964
Place Veterans Administration Hospital

INDIANA CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS
Date October
Place Indianapolis

INDIANA PHARMACEUTICAL ASSOCIATION
Date June 17-19
Place French Lick
Mid-Year Meeting
Date January, 1964
Place Indianapolis

INDIANA HOSPITAL ASSOCIATION
Date October 23-25
Place French Lick, Indiana

CENTRAL DISTRICT, INDIANA CHAPTER, AMERICAN PHYSICAL THERAPY ASSOCIATION
Date September
Place To be announced



Division of Postgraduate Medical Education of the I.U. School of Medicine

Tentative and incomplete postgraduate list for 1963-64

October 2, 4, 1963	Electrocardiography
November 6, 1963	Gastroenterology
*November 7, 1963	Surgery
November 20-23, 1963	American Urologic Association
December 11, 1963	Pediatrics
December 12, 1963	Pediatric Cardiology
January 8, 9, 1964	Treatment of Pulmonary Disease
January 22, 23, 1964	Dermatology
February 19, 1964	Orthopedics
*February 20, 1964	Management of Congenital Defects
March 4, 5, 1964	Cardiac Arrhythmias (American College of Cardiology)
March 16-28, 1964	Anatomical & Clinical Otolaryngology
March 18, 19, 1964	Obstetrics & Gynecology
April 8-11, 1964	Radiology
May 20, 1964	Treatment of Diabetes
May 21, 1964	Diagnosis & Management of Collagen Diseases
*June 3, 4, 1964	Psychiatry at IUMC

*Pending

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HERNDON P. HARDING, M.D.
JAMES L. HAGLE, M.B.A.
Administrator
GRACE M. COLLET, Ph.D.
VERNON W. SHAFER, Ph.D.
Clinical Psychologists

MARY JANE McCONAUGHEY, M.S.W
CHARLOTTE M. BERG, M.S.W.
Psychiatric Social Workers

PAULINE L. TOOILL, R.R.L.
Medical Record Librarian

ESTHER L. SIMPSON, R.N.
Director of Nurses

SHARON LaDOW, B.S., O.T.R.
Occupational Therapist

JAMES MYERS, B.S., M.Ed.
Recreational Therapist

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Association News

EXECUTIVE COMMITTEE

April 27, 1963

Present: Wendell E. Covalt, M.D., chairman; Ralph V. Everly, M.D.; Maurice E. Glock, M.D.; Kenneth O. Neumann, M.D.; Ottis N. Olvey, M.D.; Frank B. Ramsey, M.D., editor of *The Journal;* Robert Hollowell, attorney, and James A. Waggener, executive secretary.

Membership Report

Number of members as of Dec. 31, 1962		4,340
1963 members as of April 27, 1963:		
Full dues paying	3,705	
Residents and interns	122	
Council remitted	37	
Senior	338	
Honorary	2	
Military	49	
Total 1963 members as of April 27, 1963		4,253
Number of members as of April 30, 1962		4,254
Loss over last year		1

Number of AMA members as of April 27, 1963		4,139
Total 1962 AMA members as of April 30, 1962		4,130
Gain over last year		9
1963 AMA members: Dues paying	3,586	
Exempt, but active	553	
		4,139
Number who have paid state dues but not AMA dues as of April 27, 1963		114

Headquarters Office

The news release which had been submitted to the members of the committee concerning the cost to the taxpayers of Indiana of implementing the King-Anderson bill and quoting the amount of additional taxes which would be raised under the Social Security plan was reviewed and approved for release on motion of Drs. Everly and Neumann.

The secretary informed the committee he had been advised that membership rates for Blue Cross and Blue Shield for the association group would be increased, effective June 1, 1963.

A letter from Barton, Curle & McLaren concerning protection they felt physicians had under their individual malpractice insurance against libel and slander was read and this information was ordered sent to the attention of the Grievance Committee.

Building Matters

The chairman of the Building Committee reported that he had received a contribution of $1,250.00 from the Woman's Auxiliary to the Indiana State Medical Association to be used for the purchase of tables and chairs for the basement.

The report of the Building Committee was read by Dr. Everly and was accepted with compliments by consent.

Treasurer's Office

The assistant treasurer gave a financial statement for the month of March and presented the auditor's quarterly report, which was approved by consent.

Mr. Hollowell reported on the progress of his discussion concerning the establishment of a tax exempt trust which might receive contributions from members of the association.

Legislative Matters

National

The committee was informed of the plans of the American Medical Association to combat the present King-Anderson bill before the Congress and the secretary presented some literature designed to acquaint the profession with the forthcoming fight of the Farm Bureau against a socialized farm plan. Upon motion of Drs. Everly and Olvey, the secretary was authorized to prepare a bulletin and distribute this literature to the members of the association.

Local

Attention was called to the publication being proposed by the Indiana State Chamber of Commerce of a tax digest of the new tax measures adopted by the recent session of the legislature. The question was whether or not the association should procure sufficient copies for distribution to each of the county medical societies. It was taken by consent that this would not be necessary.

A report of the Commission on Legislation which was to be presented to the Council on April 28 was reviewed for the information of the Executive Committee.

Organization Matters

A letter was read from the AMA concerning the meeting to be held during the AMA annual session at Atlantic City on the relation between medicine and osteopathy. By consent it was agreed that Dr. Glock and Dr. Neumann would endeavor to represent the association at this meeting.

A letter from Lyman J. Smith on the letterhead of the American Medical Association requesting participation by the association in financing a Midwest Health Careers Recruitment Conference which was held in Indianapolis on April 23 and 24, 1963, was tabled on motion of Drs. Glock and Everly.

Letter from Dr. Carl D. Martz recommending that the association become an active supporter of the Indiana Rehabilitation Association was read and by consent the secretary was instructed to obtain additional information from Dr. Martz and place this item on the agenda for the next meeting of the committee.

A letter from the American Medical Association offering the services of staff members of the AMA and the staff of the National Blue Shield Association to discuss with the Indiana State Medical Association the question of implementation of the National Blue Shield program for persons over 65 was read. By consent it was agreed that the association did not desire such consultation.

Letter addressed to the association by L. A.

Willig requesting reconsideration by the association of the question of financial participation in the National Science Fair program was read and upon motion of Drs. Everly and Glock it was voted that this matter be referred to the Council with the recommendation that the association continue its moral support but not financial support at this time.

A letter from the South Dakota State Medical Association announcing their intention of offering H. Russell Brown, M.D., as a candidate for the Board of Trustees of the AMA was read.

A letter from Dr. Arthur Schoonveld, secretary of the Jasper-Newton County Medical Society, making inquiry concerning the possibility of dividing Jasper-Newton County Society into two separate societies was read. This matter was referred to Dr. Lowell Steen, councilor of the Tenth District, for presentation to the Council.

A letter from the Missouri State Medical Association concerning two resolutions the association proposes to introduce at the June AMA meeting, (1) regarding "Lifetime Learning for Physicians," and (2) regarding "Interns and Residents," was read for the information of the committee. These resolutions are to be discussed at the meeting of the Executive Committee and the AMA delegates.

The secretary reported that the chairman of the Commission on Voluntary Health Agencies had recommended that the association redraft resolution No. 26 concerning the voluntary health agencies and have it ready for introduction at the June meeting of the AMA in case the report of the action of the AMA on this resolution was not satisfactory. This was approved by consent.

Request of the Elkhart County Medical Society for the association to approve its Constitution and Bylaws and the opinion of the attorney concerning this proposed Constitution and Bylaws were reviewed and it was suggested that the attorney discuss this matter with the appropriate councilor at the Council meeting on April 28.

Dr. Glock stated he had received a request for the association to become a sustaining member of the Student American Medical Association through a membership fee of $100.00. Upon motion of Drs. Glock and Everly it was agreed that the association would become a member of this organization.

There being no further business the committee adjourned to meet again at 10:00 a.m. on Sunday, May 26, 1963, at which time the delegates and alternate delegates to the AMA are to be requested to attend.

EXECUTIVE COMMITTEE

May 26, 1963

Present: Wendell E. Covalt, M.D., chairman; Ralph V. Everly, M.D.; Maurice E. Glock, M.D.; Kenneth O. Neumann, M.D.; Irvin W. Wilkens, M.D.

James A. Waggener, executive secretary.

Membership Report

Number of members as of Dec. 31, 1962		4,340
1963 members as of May 22, 1963:		
Full dues paying	3,726	
Residents and interns	135	
Council remitted	41	
Senior	338	
Honorary	2	
Military	49	
Total 1963 members as of May 22, 1963		4,291
Number of members as of May 31, 1962		4,274
Gain over last year		17

Number of AMA members as of May 22, 1963		4,178
Total 1962 AMA members as of May 31, 1962		4,148
Gain over last year		30
1963 AMA members: Dues paying	3,608	
Exempt, but active	570	
		4,178
Number who have paid state dues but not AMA dues as of May 22, 1963		113

Headquarters Office

The secretary presented two proposals for cleaning of the draperies in the building and upon motion of Drs. Glock and Everly the bid from the Reed Draperies Service was accepted.

The secretary reported the resignation of Mr. Joseph Palmer as of July 1, 1963, and discussed in detail some personnel problems. Upon motion of Drs. Glock and Everly the secretary was instructed to prepare his recommendations for the meeting of the Council in July and in the meantime begin surveying the field for additional personnel.

Building Matters

A letter was read from the secretary of the Rush County Medical Society in which that society transmitted a check to the Building Fund for $550.00, representing a $50.00 contribution from each member of the society. The Executive Committee requested the president to acknowledge this letter and to thank the Rush County members for their participation.

Treasurer's Office

The treasurer reported on the financial condition of the Association and the investments, and the report was accepted by consent.

Legislative Matters

National:

The secretary reported that the Operation Hometown kits had been distributed to all county medical societies during the district meetings and that only two districts remain to be covered.

Organization Matters

The letter received by the committee at its meeting on April 27 from Dr. Carl D. Martz concerning affiliation with the Indiana Rehabilitation Association was again reviewed, together with the secretary's reply to Dr. Martz pointing out that

the committee desired additional information in order to discuss this matter again. The secretary reported that further information had not yet been received from Dr. Martz.

Reports from Dr. Nathan Salon, chairman of the Commission on Aging concerning his attendance at the annual Conference of State Executives on Aging, held in Washington, and the national meeting of the Joint Council on Care of the Aged, held at San Francisco, were reviewed for the information of the committee.

A letter from the AMA regarding the Indiana winner in the National Science Fair was read and by consent it was agreed that the president of the association should write this person a congratulatory letter.

Correspondence from Dr. Daniel Cannon of New Albany, together with the secretary's reply, was read for the information of the committee, and it was decided that this matter should be referred to the AMA delegates for their information.

The secretary reported on his efforts to obtain rulings from the State Revenue Department concerning the effect, if any, the sales tax would have upon physicians.

A letter was read from Dr. Carl J. Rudolph concerning the subject of standards for optical lenses. By consent it was agreed that Dr. Rudolph should be informed that this matter should be brought to the attention of the association through a resolution to the House of Delegates.

The secretary read excerpts from the minutes of the meeting of the Commission on Public Information, replying to the request of the Executive Committee for an opinion concerning the "Medic-alert" program. It was the consensus of the commission that the association could well encourage people to carry adequate information on their persons concerning illnesses, allergies, etc., but that the information to be so carried should be determined by the patient and his physician.

A letter from the president of the Johnson County Medical Society setting forth certain information which had been collected concerning persons over 65 in their local hospital and a letter which had been sent to the members of Congress by the society were read for the information of the committee. The committee was very complimentary of the information which this society had gathered and recommended that copies be sent to all other county societies, encouraging them to make a similar study.

New Business

A letter from Warner Williams, a sculptor from Culver, Indiana, setting forth an estimate of $100.00 for preparation of a bust of Hippocrates, was referred to the committee, and this, in turn, was referred to Dr. Everly, chairman of the Building Committee.

Future Meetings

The committee received an invitation from the AMA to send a representative to the 23rd Annual Congress on Occupational Health to be held in San Francisco, September 25 and 26, 1963. The Association will not send a representative.

There being no further business the committee adjourned the regular meeting to meet again at 8:00 p.m. Sunday, June 16, 1963, in the Traymore Hotel at Atlantic City.

EXECUTIVE COMMITTEE AND AMA DELEGATES

May 26, 1963

Present: *Executive Committee:* Wendell E. Covalt, M.D.; Ralph V. Everly, M.D.; Maurice E. Glock, M.D.; Kenneth O. Neumann, M.D.; Irvin W. Wilkens, M.D.; Ottis N. Olvey, M.D.

AMA Delegates: Harold C. Ochsner, M.D.; Jack E. Shields, M.D.

AMA Alternates: Robert M. Brown, M.D.; William B. Challman, M.D.; John M. Paris, M.D.

AMA Section on General Practice: Lester D. Bibler, M.D.

The proposed amendment to the AMA Constitution and Bylaws for the enlargement of the Board of Trustees was reviewed and the secretary reported that under the Constitution and Bylaws of the AMA as they now stand this amendment would be referred to a reference committee at the opening session on June 17.

The only way this could be by-passed would be for a motion to be made to change the order of business. The vote for this would take a simple majority. If this carried then a motion could be made for the house to convene as a committee of the whole. However this would require the unanimous vote of all *registered* delegates.

These rules were pointed out in the Constitution and Bylaws and with this information it was the opinion that if the unanimous vote of all registered delegates were required it would be impossible to obtain unanimous consent. This matter will be pursued further, however, at the time of the June meeting.

The candidacy of Dr. Lester D. Bibler for election to the Board of Trustees, providing this amendment is adopted, was reviewed and letters from several states were quoted for the information of the committee. It was suggested that inasmuch as the meeting is in Atlantic City, which is known as "lobster heaven" for conventioneers, that the association might, as a promotion for Dr. Bibler's candidacy, purchase lobster aprons with a suitable slogan with Dr. Bibler's name on them for distribution to the delegates. The secretary reported that he had received only one quotation at the time of this meeting which would require the purchase of five thousand at $55.00 per thousand. However, he did expect additional quotations. The secretary was authorized to purchase

these bibs even though it would be necessary to purchase five thousand.

The action of the Council authorizing the re-introduction of Resolution No. 26, providing the Shipman Committee (to whom the Board of Trustees referred the resolution at the interim session) brought in a report which was unfavorable, was again reviewed. The secretary was requested to try and find out what the Shipman Committee reported on this resolution and to redraft a resolution ready for re-introduction at Atlantic City. He was also requested to send copies of Resolution No. 26 to all the AMA delegates and have available the complete file of correspondence between the association and the National Foundation.

A letter from Dr. Daniel Cannon of New Albany, concerning the use of the AMA mailing list by pharmaceutical firms and others was referred to the delegates for their information.

The group then reviewed nineteen resolutions which are to be introduced at the AMA annual meeting and took the following action:

Resolution No. 1—left to the discretion of the delegates.

Resolutions Nos. 2, 3, 4, 5, 6, 7, 9, 12, 14 and 17—took the position as being for.

Resolutions Nos. 8 and 10—expressed no opposition.

Opposition was expressed to *Resolution No. 11*, and a "no" position attitude was taken on *Resolutions Nos. 13, 15, 16, 18 and 19.*

Letters from various states concerning their candidates for membership on the Board of Trustees and resolutions which they proposed to introduce were reviewed for the information of the delegates and the committee.

There being no further business the meeting was adjourned.

The delegates are to meet again with the Executive Committee at 8:00 p.m., Sunday, June 16, 1963, in the Indiana room at the Traymore Hotel, Atlantic City.

THE COUNCIL

April 28, 1963

The Council of the Indiana State Medical Association convened for its spring meeting at 9:30 a.m., Sunday, April 28, 1963, in the headquarters office building, 3935 North Meridian Street, Indianapolis, with Dr. Kenneth O. Neumann, chairman, presiding.

Roll call showed the following present:

Councilors:

First District—P. J. V. Corcoran, Evansville
Gilbert M. Wilhelmus, Evansville, alternate
Second District—E. T. Edwards, Vincennes
Third District—John M. Paris, New Albany (also AMA alternate delegate)
Fourth District—Joe M. Black, Seymour
Fifth District—V. Earle Wiseman, Greencastle
A. W. Cavins, Terre Haute, alternate
Sixth District—William R. Tindall, Shelbyville
Seventh District—Albert M. Donato, Indianapolis
Eighth District—Gordon B. Wilder, Anderson
Ninth District—Kenneth O. Neumann, Lafayette
Tenth District—Lowell H. Steen, Whiting
Eleventh District—E. S. Rifner, Van Buren
Lowell Hillis, Logansport, alternate
Twelfth District—Milton F. Popp, Fort Wayne
Thirteenth District—Jene R. Bennett, South Bend

Officers:

Maurice E. Glock, Fort Wayne, president
Don E. Wood, Indianapolis, president-elect

Journal:

Frank B. Ramsey, Indianapolis, editor

Executive Committee:

Wendell E. Covalt, Muncie, chairman
Ralph V. Everly, Indianapolis

Guests:

Harold C. Ochsner, Indianapolis, AMA delegate
Jack E. Shields, Brownstown, AMA delegate
George W. Willison, Evansville, AMA alternate delegate
William B. Challman, Mount Vernon, AMA alternate delegate
John D. VanNuys, Indianapolis, dean, I. U. School of Medicine
Robert Yoho, Indianapolis, State Board of Health
Lester D. Bibler, Indianapolis, chairman, Student Loan Committee
Paul T. Lamey, Anderson, secretary, State Board of Medical Registration and Examination
Rev. Dr. Paul B. McCleave, Chicago, director, AMA Department of Medicine and Religion
James M. Kirtley, Crawfordsville, State Senator, Montgomery and Putnam Counties

Staff:

Robert Hollowell, attorney
Robert J. Amick, field secretary
Howard Grindstaff, field secretary
J. A. Waggener, executive secretary

On motion of Drs. Popp and Steen, minutes of the meeting held January 20, 1963, were approved as printed in the April 1963 *Journal*.

Reports of Councilors

The councilors announced the dates of their spring district meetings.

To avoid many conflicts encountered with spring meetings, Dr. Wiseman announced that the Fifth District would meet at Cataract Lake on Wednesday, September 25.

The Thirteenth District will meet at Elkhart on Wednesday, September 18.

The secretary announced that intensive efforts

were being made to have the legislative chairmen of every county present at district meetings at which time OPERATION HOMETOWN kits, prepared by the AMA, outlining a program to attempt to defeat the King-Anderson bill in the current session of Congress, would be distributed. "A concerted effort will be made to try and get public opinion expressed to the members of the House Ways and Means Committee and to the various Congressmen prior to the hearings which will be held by the committee in July, which means we will have to try and work this out within the next four to six weeks. . . . We will show you this film at luncheon today. . . . If your district officers discuss this with you we hope you will go along and try to find some time for presentation of this project at your district meetings."

Matters Referred to Council by Executive Committee

1. *Program of AMA Committee on Medicine and Religion.* Dr. Covalt, chairman of the Executive Committee, announced that Rev. Dr. Paul B. McCleave, director of the newly established Department of Medicine and Religion of the American Medical Association, had been invited to attend this Council meeting and would speak to the Council following lunch.

2. *Results of the survey made by the Commission on Convention Arrangements* were called to the attention of the councilors.

3. *Seience Fair.* Action on the matter of financially supporting the National Science Fair was tabled at the January Council meeting until the April 1963 meeting. At the March 27, 1963, Executive Committee meeting, Drs. Wood and Neumann reported that they had received long distance calls concerning this, and on motion of Drs. Glock and Everly the matter was referred to the April Council meeting. The records show that the association has contributed a total of $18,500 to this project in the past, as follows: 1956, $3,500.00; 1957, $8,000.00 (Los Angeles); 1958, $00.00; 1959, $5,000.00 (Hartford, Connecticut); 1960, $00.00 (Indianapolis); 1961, $2,000.00; 1962, $00.00.

The Executive Committee at its meeting on April 27, 1963, voted unanimously not to financially support the Science Fair, in view of the lack of recognition received from such participation.

Dr. Popp spoke in disagreement with the Executive Committee's attitude, saying that in his district it was felt that this was a very worthwhile project.

Dr. Paris said that the association should not do this only for recognition but for what it does for the participants.

Dr. Black suggested that participation be done on a local level as some school systems are much more active than others in this project.

Dr. Popp's motion, seconded by Dr. Paris, that the Executive Committee's recommendation be rejected and that the Association "do participate financially in the Science Fair in an amount not exceeding $1,000.00, the money to be withdrawn proportionately from the various budget balances listed in Schedule C-1" was discussed by Drs. Paris and Glock, put to vote, and lost on a hand vote, 7 to 3.

4. *Student Loan resolution.* A resolution changing the interest rate on student loans was referred to the Council with the recommendation that the Council in turn refer it to the House of Delegates. Following discussion, and **on motions of Drs. Wilder, Steen and Black, the times for maturity of loans (left blank by the Executive Committee—in fourth paragraph) were designated by the Council, and the resolution, reading as follows, was adopted:**

WHEREAS, at present a student loan is without interest until: (a) withdrawal from medical school, (b) withdrawal from hospital internship, or (c) the completion of internship, and thereafter, including those notes past due, bears only 2% interest per annum, and

WHEREAS, the very low interest rate after maturity has acted as a deterrent or obstacle to collection and thereby has deprived the fund of moneys to lend to other medical students in need, and

WHEREAS this committee believes that it would facilitate collecting said notes at maturity if the interest rate after maturity be increased, as an incentive to the borrower to make payment and thereby keep the fund revolving,

IT IS THEREFORE recommended that said loans mature:

(a) One (1) month after ceasing to be an enrolled medical student, or
(b) One (1) month after withdrawal from hospital internship, or
(c) Twelve (12) months after completion of internship.

That they bear four percent simple interest per annum for one (1) year after maturity and six percent simple interest thereafter until paid, with attorney fees in the event suit becomes necessary to compel collection.

5. *Staff member for Commissions on Aging and Voluntary Health Agencies.* In October 1962 the House of Delegates approved the request of the Commission on Voluntary Health Agencies for the assignment of a staff person to assist the commission in its activities with the voluntary health agencies. As instructed by the Executive Committee, the secretary contacted the State Board of Health and determined that the board had personnel who would be available on a loan basis for the purpose of assisting this commission and others in carrying out their assignments. This employee's salary would be paid by the State Board of Health but for all intents and purposes he would be an employee of the Indiana State Medical Association, subject to assignment and direction by the executive secretary.

The report of the Executive Committee was dis-

cussed by Drs. Paris, Glock, Bennett and Donato, and **on motion of Drs. Donato and Bennett, it was approved as a whole. Dr. Paris voted "No" on the motion.**

Reports of Officers

DR. MAURICE E. GLOCK, president: There are several activities of the organization on which I would like to report. On February 10th we had a county officers' conference which coincided with a sleet storm, hence our attendance was somewhat diminished. The intent of this program is to aid the county society officers. Actually, I think it is of more value to the officers and committee members of the State Association. It is a two-way street—it gives us a chance to interchange ideas and ask questions. Those who attended were very much in favor of having it again. You know we used to have this year after year and discontinued it. However we decided that the timing of it is not good. I think the reason this was planned for February was possibly the thought that many society officers do not take office until the first of January. I think, Jim, that we should send out a questionnaire and find out what percentage of the county medical society officers run from June to June, and how many from January to January. It is impractical to have a big meeting and expect people to come from all parts of the state on icy roads. I favor that demand—that we have this another year but pick a better time.

On February 20 we had the First Indiana State Mental Health Congress. Doctor Annis addressed the Congress. This is in line with the AMA's national program by which they hope to implement a better mental health program in the state of Indiana and have the Indiana State Medical Association lead this instead of abandoning it to some lay organizations. This is going to require a tremendous amount of effort in the next several years. This is the only place, apparently, where the national administration and the AMA see eye to eye —the need of a better and larger and improved mental health program. We cannot patron this, we do not have the funds, but we can give leadership. We are going to have to stimulate our local societies to take aggressive action. We don't want to find ourselves in the position that we have been in the field of aging where we had no committee or commission working on this until several years after the unions and both of the major political parties took this up as a hot issue, and we are having a difficult time catching up on that.

The third meeting that I would like to report on is the Rural Health Committee Junior-Senior Day which was held approximately a month ago. Gene Rifner, as chairman of the committee, organized this. I think this is one of the finest things I have seen the state medical association do. And I would like to have you listen particularly to this as you are for the young people and so am I. We had 450 young people, young medical students at this meeting, and their wives, and this is what counts. This was a marvelous crowd. I enjoyed it very much. I have a son in medical school who attended and he enjoyed it very much. He is not going out into rural practice—I don't know where he is going—but believe me, this was a very good presentation by Dr. Rifner, by Dr. Seibel, Dr. Seibel's wife, and Gene's office assistants. It presented just exactly what this state association is for—to give the best medical care possible to every segment of our population, including the small rural districts. I think it was a tremendous thing. Jim said that we probably lost about a thousand bucks on this because we had such a marvelous attendance. It was the best that we have ever had. And this is money well spent.

This afternoon at three o'clock a program is being presented by another one of our commissions, on Civil Defense—an excellent program. I realize that you people probably will not get through in time to participate in any of this, but there has been good advance publicity. I feel that such a beautiful day as this will bring out a good attendance. I think that this will place your association in a position of leadershp in civil defense efforts. And I must say that I never realized what an effective, aggressive organization we have until I have been a spectator at these various meetings. I thought I knew a lot about this association, and I am real proud when I see the efforts of these various commissions flower in the type of meetings that I have discussed. Thank you.

Treasurer's report. In the absence of the treasurer and the assistant treasurer, the Council reviewed the printed financial statements which had been presented to them.

DR. FRANK B. RAMSEY, editor of *The Journal: The Journal* financial report in Exhibit D needs very little comment. I would like to point out that this is for the first six months of the fiscal year. We have collected 47% of the advertising revenue which we had expected, and spent 44% on our printing bill. These are the largest items and give us some idea of how close we are running to our budget. We still have the two large issues, the roster issue and the convention issue, which may throw this a little out of balance. Charles C. Thomas, the publisher, is actively working on publishing in book form all of Dr. Lieberman's tales which have been published in *The Journal* within the past two and one-half years. They are very complimentary for the writing which Dr. Lieberman has done and for the illustrations which we have been able to get for his tales. We don't know yet when the book will come out but it won't be very long.

DR. DON E. WOOD, president-elect, had no official report to make. He asked the Council to listen to a tape recording, and it was agreed that this tape should be made available to each of the districts at their spring meetings.

Report of AMA Delegates. DR. HAROLD OCHSNER reported that two holdover matters are to be considered by the AMA at the Atlantic City

meeting: (1) Enlargement of the Board of Trustees from 11 to 15 members, and (2) More adequate compensation of interns and residents.

Reports of Guests

(1) DR. JOHN D. VAN NUYS, dean, I. U. School of Medicine: Thank you for inviting me here today. I have very little to report other than the progress of the General Assembly and I don't know whether you have heard from the Senator or not but contrary to what has been in the paper I think we at the Medical Center fared quite well. You never get everything you ask for but operation-wise we will be able to make some salary increments for existing faculty and supporting staff, and, in fact, some staff additions which are urgently needed.

On the construction and land acquisition side, the contracts have been let and some construction has been begun on the Riley Hospital addition—a two and one-half million dollar addition. I will say, however, that only four hundred thousand dollars of that came from the General Assembly. The new university hospital, the teaching hospital for adults, that we have been seeking for some time and which we think is an absolute "must" apparently is going to be a reality, at least the first unit of it. Plans are rapidly being completed and we plan to advertise for bids on May 15 and to let the contract before June 30th. The bids will be opened on either the 15th or 16th of June and this will give the officials of the university time to determine the low and best bid on general contract, electrical, heating and plumbing, elevators, etc. because they all have to be separate bids. The first unit will be about a 12 million dollar project and should be completed and ready for occupancy in about 29 months after the beginning date. It will be located on the area just east of the old medical school building where two city blocks have been acquired within the last five or six years.

In the present capital budget there are sufficient funds to keep on buying the land of the Indianapolis Redevelopment Area south of Michigan street between Michigan and New York. We have acquired a great deal of land there and we will be able to go on in the next two years and acquire land as rapidly as it becomes available. This is an area which really should be acquired by the university and a large portion of it will ultimately be used for housing purposes.

There is a further question, whether or not in the future Indiana University will develop a more extensive adult education division and locate that out in the area of the medical center. There is some talk of this and it might be of some advantage. In other words, we could depend on one power plant, one maintenance building, and we could probably make a case for an auditorium which would seat all of our students and we doubt if we can make a case for an auditorium independently at the medical school. If you will recall, the auditorium in Emerson Hall will not quite seat two classes now. It used to, some of you will recall, seat the entire student body. There is some advantage sometimes to have an all-school convocation.

We feel the academic program is going well. This year's senior class is progressing very well and we have had a good experience this year with our freshmen students. I told you some time back that we were concerned about last year's freshman class—it has been a concern since the beginning because of the high dropout rate. This has not been experienced this year. Our admissions committee is still in the throes of making their final decisions on admissions to the September, 1963 class. They have accepted 183 candidates. They have better than 70 on the deferred list and admissions will probably go up to as high as 218 or 220 places between the Bloomington and Indianapolis programs. I will be more than happy to attempt to answer any questions any of you might wish to put in my direction.

I might remind you that a week from Wednesday is our annual Alumni Day. We are expecting a very good attendance at 10:30 that morning when President Elvis Stahr, who addressed you in January, will address the alumni and their guests in the auditorium at the old medical school building. We are very happy to have him the first year in office. He is making an extra effort to be with us on this occasion because he is interrupting a special meeting in New York to fly out that morning and to fly back that afternoon, so he must have a feeling that the medical alumni group, as a group and as individuals, is pretty important to Indiana University.

(2) DR. PAUL T. LAMEY, Secretary of the Indiana State Board of Medical Registration and Examination, spoke on (1) discontinuance of reciprocity with certain states, and (2) discontinuance of issuance by the State Board of temporary medical licenses, effective July 1, 1963.

Dr. Lamey explained that under the Indiana Medical Practice Act an applicant for an Indiana license must take a written examination which must be graded by the Indiana Board.

Dr. Lamey: On that basis Indiana has had to drop reciprocity or endorsement with Colorado, Connecticut, Delaware, the Hawaiian Islands, Illinois, Kentucky, Maine, Massachusetts, Missouri, New Hampshire, Oregon, Pennsylvania, Virginia and Wyoming. In these states, the state boards purchase their questions either from the national board or from a professional licensing bureau and the members of these state boards have very little or nothing to do with getting up the examination.

Although these boards conduct the examination, the papers are sent to the organization from which the questions were purchased and are graded automatically on a machine. These state boards are unable to supply us with the questions and we cannot grade the papers. The Indiana State Medi-

cal Board cannot delegate its authority to any individual or organization.

In an effort to solve this problem, we have contacted the Professional Licensing Bureau that makes out the questions for Colorado, and I think four other states. They have agreed to send us the questions, and it is hoped that we can possibly work out some solution in these cases.

Since we cannot accept national boards under our state statutes, we certainly cannot accept applicants from those states that use national board examinations and have the national board grade their questions and furnish answers for them. For this reason reciprocity/endorsement was discontinued with the 14 states as of January 1, 1963. Any applicant from these 14 states must take the Indiana state medical examination if he desires to practice medicine in Indiana subsequent to this date.

Temporary medical permits were granted under the law of 1897 for a few years. In 1954, the Temporary Medical Permit was again put into effect by rule—in order to help our teaching centers obtain residents and interns and to help physicians wishing to practice in Indiana and wishing to take our examination gain an opportunity to practice until our next regular examination given in June of each year. This rule allowed the applicant two permits to be granted at our regular meetings, which, by law, are held the second Tuesday in January and the second Tuesday in July.

As a result of the rule, we had several applicants practicing in Indiana some of which would fail our state board. Since those failing are not eligible for another Temporary Medical Permit and in many instances having established themselves in practice, they would not want to move, and the community in which they practiced would protest vigorously. Due to this, the board had a difficult problem to see that these physicians did not practice as they had no license. Directly resulting from this, the Temporary Medical Permit rule was rescinded as of July 1, 1963 in order to correct the condition.

In order to help the teaching institutions and hospitals with the problem of securing residents and interns, H.B. 1329, Chapter 206, of the Medical Practice Act was passed by the 1963 legislature and permits graduates from any approved medical school in the United States, or its possessions, and Canada to come into the state of Indiana as an intern or resident to work in our approved teaching institutions or approved hospitals on a Temporary Medical Permit. We are indebted to Senator Kirtley and Representative Bowen, who, with the close cooperation of the medical school and the large hospitals in Indianapolis, worked out a satisfactory bill, H.B. 1329, and were successful in getting it passed. Same to be in effect as soon as we, the medical board, are able to establish rules and regulations to put H.B. 1329, Chapter 206, of the Medical Practice Act into operation. The board will work on these rules and regulations at our next executive meeting May 8, 1963.

The applicants will be issued a permit which may be renewed four times, providing the medical board receives a recommendation in writing from the head of the intern and residency teaching staff of the teaching institutions in which the applicants are serving, verifying they have completed a year's satisfactory training and have been appointed for another year. The original permit will cost $25.00 and each of the four renewals will cost $10.00. It was our thought that making renewals $10.00 rather than $5.00 would be a stimulus to get the applicants to take the state board in Indiana. Thus obtaining an Indiana license he would be more likely to establish his practice in Indiana upon the completion of his internship or residency.

I might point out that there is provision in the Temporary Medical Permit statute which states that any doctor having a license in another state that has endorsement with the state of Indiana will be required to come in by endorsement rather than on a Temporary Medical Permit.

(3) DR. ROBERT YOHO, State Board of Health, representing Dr. A. C. Offutt, State Health Commissioner, brought to the attention of the Council the following studies which will be made by the National Communicable Disease Center in Washington, in which the vital statistics which are forwarded to that office by the State Board of Health, will be used if permission is given by Dr. Offutt to do so:

a. *Investigation of all deaths in the United States caused by pesticides, which involves follow-up of certain death records with physicians.*

This involves a total of 460 deaths in 1960. The National Communicable Disease Center will request directly from each state a copy of pertinent death records and then, where additional information is required to establish the exact substance involved in the death, a follow-up questionnaire will be sent to the physician. As a result of this study, it is hoped to learn the types of pesticides apparently causing death.

b. *Investigation of possible deaths from Enovid by the Food and Drug Administration.*

About 2,000 deaths are occurring annually among women in the United States which might have been associated with the use of Enovid. The Food and Drug Administration will follow up with physicians in an attempt to assess the possible relationship of deaths from thrombophlebitis.

c. *Investigation of reliability of diagnos's of chronic respiratory diseases entered on death certificates.*

Again this will mean a questionnaire will be sent to the certifying physician requesting information concerning the past medical history of the deceased. Then a report will be prepared summarizing the

results of the investigation. This will become part of a study of differences in causes of death reported in Great Britain and the United States.

On motion duly made and seconded, the Council approved of the State Board of Health granting permission for use of Indiana records in these investigations.

(4) DR. JAMES M. KIRTLEY, joint senator from Montgomery and Putnam counties, addressed the Council, summarizing the bills passed by the last General Assembly.

Dr. Paris offered the congratulations of the Council and a resolution of appreciation for work well done by both Senator Kirtley and Representative Otis Bowen during the 1963 General Assembly.

(5) THE REV. DR. PAUL B. McCLEAVE, director, AMA Department of Medicine and Religion, spoke at length on the purposes and program of this newly formed department.

DR. McCLEAVE: There are many in medicine, and also individuals, lay people, and clergy across the country vitally concerned with the total care and treatment of man as a whole being. We recognize man as a physical, spiritual, emotional and social being. . . . We also recognize that there are many agencies across the country, particularly in mental health, wherein the physician, the clergy, and lay people are becoming concerned with the total treatment of the patient.

The administration of AMA established the department in September 1961. The purpose of the department is for one purpose and one purpose alone, that is to create a climate by which the physician and the clergyman might come together to concern themselves with total care and treatment of the patient, recognizing there are times when there are patients that we have wherein we can use the services and the facility which the clergy and the church offer. This does not mean that all patients who come to us need the clergy any more than when the clergyman has a parishioner come to him that he needs a physician. But there are times and places, under unusual circumstances, where the two professions can be of aid to each other with respect to the patient.

In the past 18 months we have interviewed the national leaders of 15 major religious groups in America. The response on the part of the church that American medicine was concerned about this and that medicine was trying to do something was tremendous.

We also selected eight states for pilot studies, met with the state councils and interviewed 10 or 12 physicians in each of the states. From the results of these contacts, the Board of Trustees established a committee of 10 physicians and 10 clergymen, representing the various areas of medicine and religion across the country. This committee is to be an advisory committee to the Board of Trustees and to the department.

We recognized that the program must be directed from the county medical society level; therefore we conducted a pilot study, selecting three county medical societies in each of the eight states, 24 county medical societies. The county societies were asked to put on a program wherein the societies invited the clergy of the local level to come and discuss mutual problems of patient care with them.

The department is a servicing department, making suggestions of program, topic and materials to the county societies through a state committee and state office.

We are requesting that the Council consider the potential value of this program and that the Council establish a State Committee on Medicine and Religion. This committee then would be responsible for encouraging the county medical societies to carry out the program in this area.

Our department has prepared a manual outlining the approach.

There are now 31 states that have established state committees. Our department will work through the state committees only, to service them to the best of our ability and to assist them all we can to make possible the institution of the program in all of the county medical societies.

Discussed by Drs. Corcoran, Popp, Rifner and Glock.

It was taken by consent that the Executive Committee should investigate the possibility of assigning this program to either the Commission on Special Activities or the Commission on Inter-Professional Relations, and to report back at the next Council meeting.

Matters from Committees or Commissions

(1) *Building Committee.* DR. EVERLY, chairman, presented the following report:

The association has occupied our new building for a period of eleven months, as of the first of April. If you remember, we actually began operations in the new building on May 7, 1962 and just one year ago the Council met for the first time in this room.

While it is impossible to give you an accurate figure for a full year's operation, our committee felt that you might be interested in having a breakdown of the cost of occupancy of the building during the past eleven months.

For heating and air conditioning, the fuel bill has totalled $1,973.08; electrical energy has amounted to $2,080.53; water $337.52; for a total cost of utilities during the past eleven months of $4,825.86; protection $403.20; janitorial service $2,406.60; maintenance and supplies $2,015.84; for a total cost including utilities of $9,216.77.

Now breaking this down to the square foot cost of the building, we find the total cost of operating the building comes to .784¢ per square foot per year. We find that our average monthly expense during the past eleven months comes to $837.88 per month. Computing our monthly cost on the

basis of square footage of the building, we find our cost comes to .0713¢ per square foot per month.

It is interesting to note had we occupied the same amount of space as we now occupy at the same rental as we were paying at the Hume-Mansur Building, our total rental expense for the past 11 months would have been $32,315.25. Had we moved into other quarters at the rental prices which were asked for a modern air conditioned building, using the same amount of space, our rental for the past 11 months would have amounted to $48,472.93. Therefore, you can see by this report that while our total cash outlay is more, when we compute it on the per square foot basis, it is considerably less.

We feel this is a good operating record for the past 11 months. We have had several problems coincidental to the operation of a new building but the architects, contractors, and suppliers have been most cooperative in remedying the problems as they have arisen.

Another analysis which we feel might be of interest to you is an analysis we have made of the meetings and the attendance since the building has been in operation and the cost of feeding these people. The figures are not guaranteed to be exactly accurate as we have attempted to reconstruct the number of people who have been fed and the total amount we have spent for food. In this period of time we have fed a total of 476 people at a total cost of $553.24, which averages out to $1.16 per person. For a comparison on the saving the building has afforded us on food cost alone for commission and committee meetings, we were spending before an average of $2.75 per person to feed them at the University or hotels. Multiplying 476 × $2.75 per person, we arrive at a figure of $1,309.00. Therefore, the building has, in addition, saved the association $745.76 in foods costs during the past 11 months.

Now this brings your committee to a proposal which we desire to present to the Council today for your consideration. In serving the committees and commissions food, in the main it has consisted of cold ham, cheese, cold beans and cold potato salad. We have catered in from the outside hot food for the Council meetings. While this has sufficed in some instances, at the present time we do not have facilities for keeping food warm or the preparation of warm food in this building.

Another most difficult situation we have experienced is that we have absolutely no facilities for cleaning up following lunches in the building. We have no way to wash dishes, pots and pans, coffee urn, nor do we even have a suitable method for obtaining water for making coffee and for drinking water.

It has been necessary for us to rent equipment in order to handle warm food and we are of the opinion it is time for the association to give some consideration to the installation of a warming kitchen which would provide for the handling of warm food and the preparation of some food for these meetings. In order to get some idea of what this would cost, we discussed the matter with some professional people, such as club managers, architects, etc., and they were all unanimous in recommending that we have the National China and Equipment Company give us an idea of what we would need in order to provide the appropriate facilities.

Consequently, we called this company and they have made a layout which is displayed in this room for your viewing of what a proposed warming kitchen would be like. This kitchen has been designed to take care of the preparation of food for up to 75 people. Their estimate for the fixtures comes to $6,176.25; this figure does not include installation. It would, of course, be necessary for us to provide wiring in this area as well as water and sewage outlets, but by placing this equipment along the wall, it merely means we would have to go through a block wall to obtain these connections in the present boiler room.

We would hope that the Council might look with favor upon authorizing the installation of a warming kitchen in the building. To offset the cost of kitchen facilities, Drs. Karl Ruddell and Maurice Glock, our president, have contributed a sizeable sum ($871.11) which has been designated for the "kitchen kitty."

I am very happy to be able to announce too that our loyal women have recently given us a check for $1,250 to be used to buy chairs and tables for our dining facilities.

It has been gratifying also to learn that through the efforts of our assistant treasurer in writing to our members who have not previously contributed to the building fund, he has been successful in receiving an additional $4,675.00.

This completes our report. We would be more than happy to attempt to answer any specific questions you might have concerning this report.

(2) *Council Liaison Committee with Blue Shield, composed of Drs. Bennett, Wiseman, Steen and Donato.*

The Council again discussed the letter written by Dr. Walter L. Portteus, president of Mutual Medical Insurance, Inc., in which he proposed two methods for the election of councilors and Blue Shield board members,—(a) Councilors and Blue Shield district board members to be elected by the district if 40% of the eligible physicians of the district are present at the meeting, and (b) In the event the attendance is below 40%, that the president and secretary of the county societies with the delegates or alternates to the Indiana State Medical Association from each county society in the district constitute a committee to nominate and elect the councilors and the Blue Shield district board members.

The chairman said that his district is opposed to this manner of election of councilors and Blue Shield board members.

Drs. Edwards and Paris discussed the qualifications of members elected to membership on the Blue Shield Board of Directors.

Dr. Edwards moved "that we thank Dr. Portteus for his suggestion and that we recommend that the districts be encouraged to appoint as new Blue Shield board members either previous Blue Shield board members from their districts or members who have had training on the Commission on Medical Economics and Insurance. Motion duly seconded, put to vote, and carried. The president was instructed to write to Dr. Portteus.

DR. EDWARDS reported on two recent meetings:

(a) *Blue Shield Advisory Committee meeting held on April 20 and 21.* The membership was composed of staff representative physicians from all over the state. The main subject was utilization committees in which the program was instituted or requested action by these various staffs coming from the Joint Cost Committee which is a component of the ISMA Commission on Medical Economics and Insurance. Indiana's study of pattern of patient care is a little different approach to utilization studies which have been made in other states and we think it will be more effective, and we would urge your support in your own hospitals in your district, to try to institute this different approach.

(b) *Labor Advisory Committee to Blue Cross-Blue Shield meeting, held Wednesday, April 24.* There was considerable criticism that doctors on the Blue Shield Board represent the public and not particularly organized medicine. Blue Shield is organized medicine and anything that Blue Shield does reflects organized medicine and I think those doctors among us who are on the Blue Shield board should remember that—whenever Blue Shield becomes a separate entity from organized medicine we are going to get into trouble.

(3) *Council Ad Hoc Committee with the Indiana Hospital Association.* (Composed of Drs. Edwards, George W. Willison, R. James Bills, Lowell I. Thomas and C. Powell VanMeter.)

Dr. Edwards reported that the Ad Hoc Committee had met with the hospital administration representatives on March 11, at which time the hospital group requested a formalized statement that could be submitted to their membership.

The Ad Hoc Committee met again on April 26 with representatives of the special groups, radiology and pathology.

DR. EDWARDS: We had a long meeting, discussing not only the approach to be used but some of the background material and concept involved. We think it was very productive.

(Dr. Edwards distributed copies of the Ad Hoc Committee's suggested procedure to permit the transfer of x-ray and laboratory and physical medicine benefits from Blue Cross to Blue Shield. A copy of this proposal is to be sent to each hospital administrator and to the county medical society presidents with the instruction that they discuss this program and this change, and the reason we want it, with hospital board members, not depending on the administrator to educate the board.)

DR. EDWARDS: We have asked the cooperation of the societies of radiologists and pathologists in Indiana, who will send informative literature to their members at the local level, because this will be decided at the local level. *Briefly, what we are asking the hospitals to do is to sign a statement that they are willing to bill Blue Shield, not Blue Cross, for these professional services.* It is a very simple thing, it is not going to be expensive, it is not going to be cumbersome. Now, we would like action from the Council to request by letter from the respective societies of radiology and pathology a statement of agreement and active support at the local level by members of their organizations for the Ad Hoc Committee in their efforts to transfer professional services from Blue Cross to Blue Shield. . . . We ask all of you to talk with your hospital board members, to encourage the component county societies in your districts, to actually get this thing established at the grass roots level.

(4) *Council Liaison Committee with I. U. School of Medicine.* (Composed of Drs. Glock, Wood, Covalt, Neumann and Black.) Drs. Glock and Black discussed the straight internship program of the University.

(5) *Student Loan Committee.* Dr. Lester D. Bibler, chairman, reported that since the last meeting of the Council loans totaling $2,500.00 have been granted to seven students. Cash balance in the fund is $2,003.94 and loans outstanding total $39,144.30. Since the program was started in 1956, 135 loans have been granted to 110 students. In March, 1963, a total of $6,900.00 in past due notes was outstanding and at this time this has been reduced to $3,975.00.

(6) *Annual convention.* Following discussion by Drs. Paris and Edwards of the program for the 1963 annual convention, **on motion of Drs. Edwards and Steen, the Council approved acceptance of the Convention Arrangements Commission's report.**

(7) *Report of the Commission on Legislation* was given by Dr. Black, chairman.

(8) *Survey on county society attendance,* compiled by the Commission on Special Activities, was reviewed. At its meeting on April 21, the commission voted to ask the Council for permission to publish this information in booklet form for distribution to each county medical society. **By consent, the Council directed that this report be mimeographed and sent to the county medical societies.**

Economic and Organization Matters

(1) *Remission of state dues.* The Council voted the remission of state dues as follows:

Lake County—one member, because of serious illness, on motion of Dr. Steen, taken by consent.

Marion County—two members, one due to ill health, and one because of retirement from active practice, on motion of Dr. Donato, taken by consent.

Vanderburgh County—one member, because of

illness, requesting remission of 1962 state dues. On motion of Drs. Corcoran and Edwards, it was taken by consent that remission of this member's 1962 dues should be granted.

Wayne-Union County—one member, due to physical disability and retirement, on motion of Dr. Tindall, taken by consent.

(2) *Nominations for Editorial Board,* (election to take place at the fall meeting of the Council), were deferred until the July Council meeting.

(3) *Use of headquarters building by other groups.* This matter was discussed at the January Council meeting and action was deferred until a legal opinion could be obtained. No further action was taken at this time.

(4) **Division of Jasper-Newton County Medical Society into two separate county medical societies was approved on motion of Drs. Paris and Black.**

Summer Meeting of the Council

By consent the summer meeting of the Council is to be held on Sunday, July 14.

There being no further business, the meeting was adjourned.

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This summary of what is happening in Washington is prepared by A.M.A.'s Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D. C.—The Department of Health, Education and Welfare is well along in its investigation of krebiozen, the controversial product which has been distributed as an anti-cancer investigational drug.

HEW disclosed its progress in the investigation in answering a suit filed in federal district court by Dr. Stevan Durovic, a refugee Yugoslav physician who maintains he discovered krebiozen. The court denied Durovic's petition for a temporary injunction against the Food and Drug Administration which would have hampered the federal government's investigation of krebiozen.

HEW said it is trying to answer the basic question: Is krebiozen effective? To get the answer, HEW said, "it is necessary to know precisely what krebiozen is, how it is manufactured, and what controls are used to insure its safety, efficacy, sterility, purity and identity. The results of tests on animals and full details of the case histories of tests on human patients must be known.

"It is the responsibility of the manufacturer to make this information available to FDA. The sponsors of krebiozen have been advised repeatedly since the filing of their first new drug application in 1954 that information submitted by them has not met the foregoing requirements."

FDA personnel began the government investigation last February by copying 508 case history records furnished by Durovic and for each of which it was claimed that krebiozen had been effective in some measure. The FDA then set out to obtain the full medical facts and records about each case. This entailed visits to patients, physicians, hospitals, laboratories, pathologists, surgeons, radiologists, and anyone else associated with the treatment of these patients.

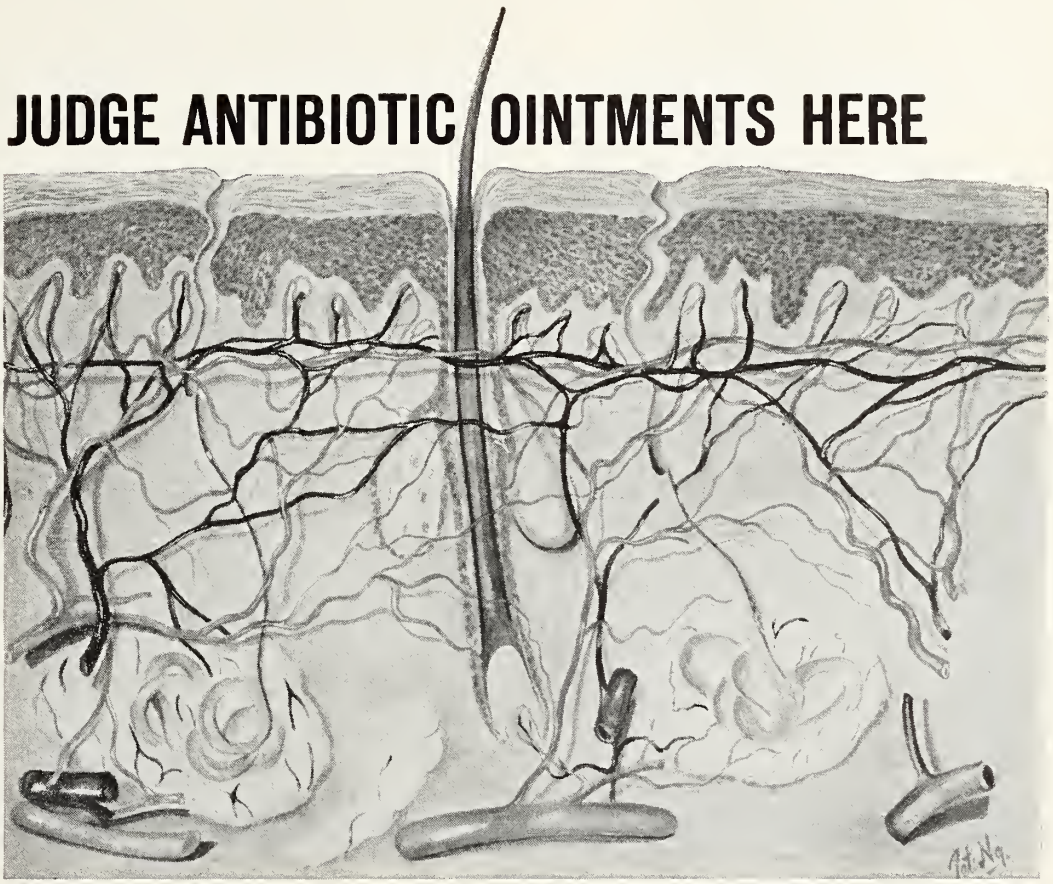
"About half of the 508 cases copied by the Food and Drug Administration and NIH officials have already been thoroughly investigated by the FDA's field staff," the HEW said in a July 3 report. FDA expects to complete this phase of the investigation within a few weeks.

"As these completed cases are received by FDA in Washington, they are reviewed by medical officers of the Bureau of Medicine, FDA, and a summary made of each case together with the physicians' conclusions as to whether the claim of benefit is justified by objective evidence. The review of about 100 cases by these physicians has been completed to date.

"Physicians of the National Cancer Institute will make a second independent review of each case, consulting when necessary with outside

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experts in the particular fields of treatment involved to determine whether any claim of benefit is justified.

"These reviews will be the basis on which judgment will be made by scientists at the National Cancer Institute as to whether clinical testing by NCI is justified."

Durovic filed his suit for an injunction after FDA officials undertook to acquire information relating to the manufacture, packaging, processing, and distribution of krebiozen. In this inspectional phase of the investigation, the FDA seeks to determine the composition of the product, how it is made, the controls exercised in the manufacture to insure uniformity of composition, purity, sterility, potency, stability and safety, the labeling employed, the distribution of the product, and other matters bearing on the legality of distribution of the product under federal law.

The developers of krebiozen claim it is made from a yellowish-white powder extracted from the blood of a horse. This powder is dissolved in mineral oil and the combination is put into a glass ampule which holds one cubic centimeter.

Some of the powder substance was obtained from horses killed in Argentina and some of it from horses at Rockford, Ill. The blood of the horses killed at Rockford was used to prepare two batches of the powder in the Ken-L-Ration Division of the Quaker Oats Co. in 1959 and 1960, the government brief said. The division makes dog food.

"The conditions of pre-treatment inspection of the horses, of injecting the animals, of selection of animals for bleeding, of bleeding, and of handling the blood and plasma met none of the basic requirements of current good manufacturing practice," the brief said.

TOO MUCH FEDERAL INTERVENTION

The American Medical Association warned that research on new drugs could be seriously hampered by too exacting regulation and supervision by the federal government.

Dr. Hugh H. Hussey, director of the AMA's Division of Scientific Activities, told a Senate subcommittee that "medicine and the pharmaceutical industry have established an outstanding record, particularly over the last two decades, in the discovery, development and use of life-saving, health-saving and pain relieving drugs."

"The benefit to our people from such discovery is so great in terms of reduced mortality and the increased control of numerous diseases that it is difficult to speculate what the state of our nation's health would be without them," he added.

Dr. Hussey said the AMA was well aware of the responsibilities of private industry in drug research, developing and marketing. But these activities, particularly research, could not be stereotyped, he said.

"There are few men and few organizations with the talent, experience, resources, knowledge and courage to carry out drug research from the initial step to the point where the drug is available to save the lives and health of our citizens," Dr. Hussey said. "The manner in which these men and organizations operate is highly individualistic. It is, therefore, important to insure protection of the creativity of such persons which could be harmed by standardization of their pro-

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cedure through unnecessary and overly burdensome governmental regulation and supervision.

"Thus, in the best interests of the health care of the American people, consideration must be given to the benefits, accomplishments and the work and practical problems of the drug investigators and pharmaceutical industry, as well as to the responsibilities of the Food and Drug Administration, in assessing and solving problems in this field. The AMA does not, and we are sure that no one in the government, in the pharmaceutical industry or in the scientific professions involved, want to see a single individual injured by an unsafe drug.

"We are equally sure these same groups are similarly opposed to any regulatory measures which would delay or prevent the development of life-saving and health-saving drugs. Thus, in considering the proposed regulations governing investigational new drugs, we believe that there is only one ultimate test to be applied: What procedures and what actions of government, industry and the scientific professions will lead to the quickest discovery and most effective utilization of drugs for the greatest benefit of the people of this country in their constant struggle against disease and death?" ◄

From *The Journal* 50 Years Ago

. . . A variety of operations for advancing an ocular muscle have been devised and described. Some operators prefer to shorten the external rectus by tucking or folding the belly of the muscle without disturbing the attachment to the eyeball, whereas others separate the tendon of the muscle from the globe at its insertion, and either with or without shortening, the cut end is secured to the eyeball at a point nearer the cornea than the original insertion.

The essential objection to most advancement or tucking operations is that the immediate results are good, but many of the cases present relapses a few months later, due to disturbance in the nutrition and tone of the muscle advanced, or a failure of the sutures to hold the muscle in its advanced position. The best results are secured from an operation in which the silk sutures, reasonably heavy enough to prevent cutting, are so placed in the muscle that there is little or no strangulation of the muscle's nourishment, but with sufficient anchorage to prevent stretching or tearing, and then securely fixed in the tough scleral coat of the eyeball close to the cornea. Worth's advancement operation is perhaps as satisfactory in this respect as any other operation, and excellent results may be obtained from its employment.

* * *

A point of considerable importance in the after-attention of advancement operations is to keep the patient quiet and both eyes bandaged for from six to eight days, or until the muscle shall have had time to become rather firmly fixed to its new attachment. The stitches should not be removed short of seven to eight days, and immediately that the eyes are uncovered, the glasses, containing full correction of the error of refraction, should be worn constantly. Frequently the effect of the advancement is improved by employing orthoptic exercises with the amblyoscope, or in the case of older children by using prism exercises. Some operators continue the use of atropine in what was formerly the fixing eye for a period of two to six weeks following the advancement operation, but this is seldom necessary. . . . "The Cause and Treatment of Convergent Squint," Albert E. Bulson, Jr., M.D., *JISMA*, August, 1913.

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REFERENCES: **1.** Barden, F.W., Hill, P.S., Mahaney, W.F., and Cuneo, K.J.: J. Maine M.A. 45:11, 1954. **2.** Chaput, Y., and Baillargeon, J.: L'Union med. du Can. 86:205, 1957. **3.** Hock, C.W.: Clin. Med. 8:1932, 1961. **4.** Kilstein, R.I.: Rev. Gastroenterol. 14:171, 1947. **5.** Marks, L.: Am. J. Gastroenterol. 27:180, 1957. **6.** Wharton, G.K., Balfour, D.C., Jr., and Osmon, K.L.: Postgrad. Med. 21:406, 1957.

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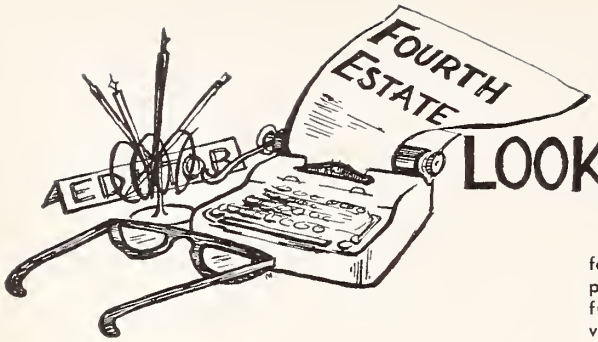
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LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentotion fo opinions which appeor on the editoriol pages of the public press, and which ore of interest to the medical profession. Its function is to review comments which moy be fovoroble or unfovoroble to medicine. Members ore invited to submit editoriol clippings for this column.

To Do The Possible

From the often-repeated philosophy that government is supposed to do those things which people cannot do for themselves, the idea is planted that government does indeed have superior powers for doing things.

The Foundation for Economic Education has produced a revealing comment on this idea. To get the picture, begin by imagining yourself living at the beginning of this century, and at that time pondering a list of the following problems:

1. To build and maintain adequate roads.

2. To increase the average life span by 30 years.

3. To make the continuing picture of an action, together with its associated sounds, visible and audible instantaneously on the other side of the continent, and to provide this communication as a daily service.

4. To develop a medical preventive against death from pneumonia.

5. To transport physically a person or a box of cargo from Los Angeles to New York in four hours.

6. To build, in numbers sufficient for the whole population of the country, a horseless carriage capable of transporting passengers in comfort and safety at speeds from a crawl to 75 miles an hour, of being driven all day or all night at 60 miles an hour, of being driven for thousands of miles with only elementary maintenance.

In the framework of the knowledge of 1900, which of those would be chosen as the most practically possible of accomplishment in the ensuing 60 years? The building of roads would have seemed the most attainable, of course. How to do it was known. All that would be necessary would be to get to work.

The road-building task was taken over by government. The others waited to be taken up by private enterprise.

Of the problems in that list, only the one taken up by government—the building of an adequate road system—remains undone. The other things have been accomplished.

Now let's bring the lesson into the current scene. Take two other items, both in the health field, both recognized as problems 25 years ago.

Problem No. 1, to provide adequate facilities for care and treatment of the mentally ill. Problem No. 2, to control the crippler and killer, poliomyelitis. Which of those then would have seemed attainable? The first, providing mental health facilities, was certainly the more easily within reach because what had to be done, and how, were pretty well known. Polio was a mystery, striking in wild waves that were predictable yet seemed to have no pattern to yield any clew to the means of prevention.

The provision of mental health facilities was already largely in the hands of government and largely it has been left there. The problem of polio was taken up by private enterprise, and polio has been defeated. The mental health problem remains to plague us. Indeed it is one of the rallying points around which the hue and cry for more state spending have been centered in this year's legislative marathon.

The drums are beaten for the argument that the cause of mental health and various other causes must have more and more tax

money in order to get something done about them. Yet the things government undertakes to do are the things that don't get done.

When we are faced with a problem that we really want to solve, the thing to do is get government out of the way, or at least into a clearly limited role, so that it will be plain that the task is for private enterprise. Then, if the people really want the thing done, it will be done.—*Indianapolis Star,* April 22, 1963.

It's Your Money

Here are some more of those studies that the National Institutes of Health pay for with your tax dollars:

Studies of silent thinking, $26,565; the social role of the aging wild ungulate,* $8,205; a stereotactic† atlas of the beagle brain, $9,775; studies of disease in a giant snail, $20,092; travel of synthetic detergents with percolating water, $20,991; red tuna and yellow fat disease in the cat, $19,965; longitudinal growth studies on anomalies of the head, $23,712, and initiation and support of a colony of baboons, $61,985.—*Indianapolis News,* April 27, 1963.

Lord Beveridge's Dream

William Beveridge, who died in England recently at the age of 84, was one of the very few men who have drawn up ambitious plans for society and have seen the plans come largely true. Lord Beveridge was the author, in 1942, of Britain's "cradle to grave" social security system, which includes a generous pension plan and nationalized medicine.

The irony of Lord Beveridge's life was that in his later years, as *The Economist* of London said, he was "sad, even soured, about the inflationary and inconsistent ways in which others had evolved his Frankenstein monster—the 'welfare state'."

"Inflation," Lord Beveridge said in an interview printed in *U. S. News & World Report* in 1959, "is one of the major evils that we have to get rid of. It makes social security very difficult because the pensions which were sufficient when they were fixed by the state are not sufficient."

What caused this inflation? "A lot of associations of workers and employers," Lord Beveridge said, "are debasing the currency by asking for more shillings for the same amount of production."

Doesn't the welfare state itself, leading as it does to frequent deficits, contribute to inflation? "Not in the very least."

Lord Beveridge was right about the damage caused by inflation, but wrong about its cause. The only way wages and prices can rise, without quickly putting factories out of production and labor out of work, is for the money supply to rise. And only the government can bring about a substantial rise in the money supply, chiefly by spending more money than it takes in. True, labor leaders often urge inflationary government policies as a means toward higher wages; but neither they nor management can "debase the currency" without the government's help.

The welfare state itself is, from a political point of view, the easiest path to deficit spending. The costs of Britain's plans have mounted year by year and have consistently kept well ahead of the taxes which were supposed to pay for them. Our own social security program has run into the same problem and taxes have been raised to a point far higher than originally planned. Other welfare schemes are advanced and too often adopted without even the pretense of raising money to pay for them.

This is why the money is debased. It is why any government which tries to be a welfare state or to create "full employment" by government spending—another of Lord Beveridge's plans—is almost certain to bring about inflation. And it is why planners like Lord Beveridge, no matter how well meaning, will never be satisfied.—*Chicago Daily Tribune,* March 28, 1963.

Litterbugs vs. Beauty

In a world essentially beautiful, man in the mass is the fiercest despoiler. Yet most individuals have within them a deep love of beauty. Some, too many, simply are forget-

* A hoofed mammal . . . having hoofs.

† Stereotaxia: the production of electrolysis in a definite circumscribed area within the brain, with minimal damage to the remainder of the organ.

ful or behave under the illusion that their own private spoilations don't count for much in the larger panorama. But they do.

Take the average litterbug. We are not talking about the sort who deliberately dumps whole basketloads and carloads of trash wherever he thinks he won't get caught. We are talking about the person who tosses small things onto streets and highways, usually without thought.

The sum total of this is frightful. Now that mid-spring has passed, the snows have gone, the grass gets mowed along highways, and our own community is putting on its best clothes for the 500, one becomes acutely conscious of the amount of trash that mars the berms of our highways and frustrates the best efforts in downtown Indianapolis and residential areas to "look sharp."

There are ordinances and laws against litterbug practices, of course. But police cannot catch more than a tiny fraction of offenders. It is up to each of us as individuals to police ourselves. We love beauty. Let us show it by not discarding even the smallest items such as chewing gum wrappers where they will offend the total scene. —*The Indianapolis News*, May 15, 1963. ◄

About Our Cover

You tell your patient ". . . take a deep breath . . . and again . . . once more. . . ." You are then able to detect any signs of congestion in the lungs or irregularity in the ryhthm of the heart beats; your Dr. Watson in this detective work is a simple and inexpensive instrument, the stethoscope; an instrument so frequently used that it is practically synonymous with the word "doctor."

One hundred and fifty years ago it would have been impossible to make an early diagnosis of pneumonia or heart disease because it was not until 1816 that a Frenchman, Rene Theophile Hyacinthe Laennec, invented the stethoscope. Familiar with the laws of acoustics, he knew that the sound of a pin being scratched across the end of a piece of wood would be clearly audible if one pressed an ear to the other end of the wood. Laennec reasoned that this fact could be turned to good account in unraveling the mysteries of chest diseases; rolling a piece of paper into a cylinder, he applied one end to the chest of a patient and, pressing his ear to the opposite end, was delighted to find that he was able to hear the action of the heart far clearer than he had ever heard it using the accepted method of placing his ear directly on the patient's chest.

In 1819 Laennec published his *Traite de L'auscultation Mediate*—his descriptions of lung conditions such as bronchiectasis, pneumothorax, hemorrhagic pleurisy and emphysema were so remarkable that his treatise was translated into many languages almost immediately after publication, with the result that his invention was quickly put into practice.

Laennec's stethoscope was monaural, and it is the binaural stethoscope that is the one now used most frequently. A forerunner of the binaural stethoscope as we know it today was the one invented by George Phillip Cammann of New York.

The stethoscope depicted on our cover is a later model by Dr. Cammann and was described in an editorial in the *New York Medical Times* of January, 1855. This improved stethoscope was of two tubes of German silver, gently curved, with the objective end of ebony. Flexible tubing was between the distal end of the tubes and the chamber. The two tubes of gum elastic and metallic wire were kept in connection by means of a jointed bar with a spiral or elastic spring and a band of elastic material between the bar and ivory knobs, which fitted closely into the ears—a self-adjusting mechanism. The instrument was more than a foot long.

Cammann himself only used his stethoscope on special occasions. He felt that too frequent use of this instrument would cause the ear to lose its natural sensitivity; in fact he never attached his name to the instrument and worked on it almost as a hobby. However his pastime produced an instrument that physicians used constantly and without it, the practice of medicine would be seriously hampered.

The Journal would like to express gratitude to the University of Kansas Medical Center for permission to use the photograph on our cover, and also to Phoebe Peck of the Department of History who made her article, *Dr. Cammann and the Binaural Stethoscope* available.—M.E.R.

The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 56 — August 1963 — Number 8

High Incidence of Phenylketonuria In an Isolated Indiana Community

PAUL H. MARTIN, M.D.
LOUISE DAVIS, R.N.
DOROTHY ASKEW, R.N.
Elkhart*

PHENYLKETONURIA, the disease in which large amounts of phenylpyruvic acid are excreted in the urine, was discovered by Folling in 1934.[1] It is currently well recognized that the disease results from a genetic defect which leaves the victim unable to metabolize phenylalanine.[2] The phenylalanine level in the blood builds up and an intermediate metabolite, phenylpyruvic acid is excreted in the urine. Associated with the high blood levels of phenylalanine is irreversible brain damage, and the phenylketonuric child develops severe mental retardation.

The importance of early detection of the disease was significantly altered when it was recognized that severe mental retardation in these patients could be avoided by administration of a low phenylalanine diet. Within the past few years, a simple dip-and-read stick test, Phenistix† has been developed for the detection of phenylpyruvic acid in urine.[3] This test can be performed early in an infant's life, and if phenylketonuria is detected, the low phenylalanine diet can be started and mental retardation avoided.

We are conducting a program under which all newborn infants in Elkhart county are tested for phenylketonuria with this stick test. The purpose of this communication is to report some interesting observations we have made during this program.

Material and Methods

The Elkhart County Health Unit is sending a phenylketonuria test kit to the parents of each newborn child along with the birth certificate. This kit contains a letter of explanation, a folder containing three of the test sticks and a return post card. The tests are performed by the parents at recommended intervals and the results are returned to the office on the post card. This program has been underway since August, 1961. Results of this study will be published at a later date.

In the course of the program it was decided to determine if phenylketonuria occurs significantly in older age groups. Tests were performed in several communities. In one community, formed of members of a strict religious sect, it appeared there was a much higher incidence of phenylketonuria

* From the Elkhart County Health Unit.

† Phenistix is a registered trademark of the Ames Company.

PROBABLE PATH OF INHERITANCE OF PHENYLKETONURIA

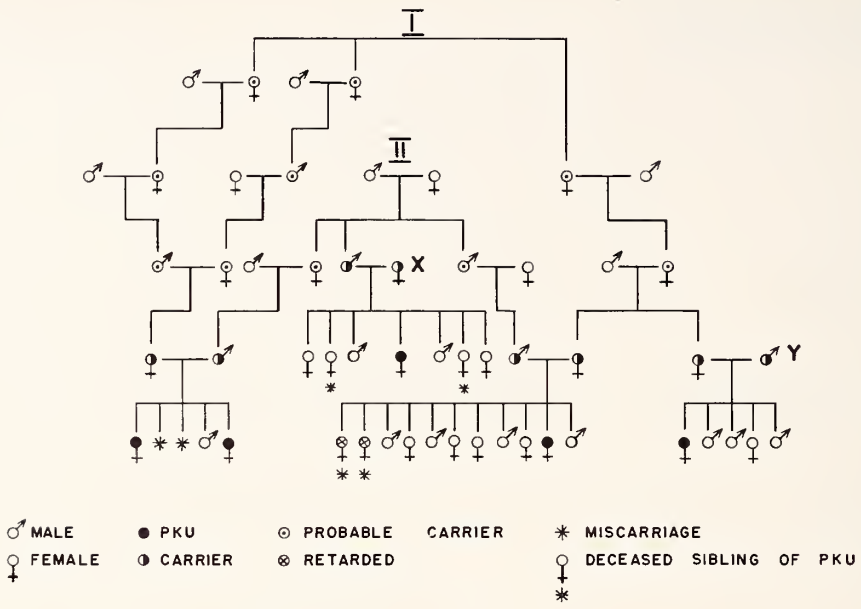


FIGURE 1

than is found in the general population. Further study of this group was begun.

Observations

The stick test was performed on urine specimens from 310 members of 49 families in this community. The age of these people ranged from infancy to 74 years. Of the specimens tested, five were positive for phenylpyruvic acid. One of these subjects was found to be phenylketonuric on her 15th day of life and the low phenylalanine diet was begun on the 17th day.

The incidence of the disease in this population, one in 62, significantly exceeds the incidence, about one in 25,000, which has been estimated as that in the general population.[4] As the disease results from a genetic defect, it might also be expected that the community exhibiting a high incidence might have a high degree of consanguineous marriage. There are a relatively large number of marriages between blood relations in the community but, interestingly, blood relationships were not established between any mothers and fathers of phenylketonurics.

What appears to be the most likely path of inheritance of the disease is shown in Figure 1. This chart is incomplete; many of the members of the families have been omitted to make the probable path clear. The disease appears in the children of marriages occurring between two families, family I having been traced back to three sisters and family II having been traced to the great grandparents of three and the grandparents of one of the phenylketonurics. It would appear that members X and Y are carriers not related to either family I or II but the family name of both X and Y is the same as that of family I. Their relationship to this family has not been established, however. It seems possible that X and Y might be related to family I at some generation preceding the three sisters. In such a small community with the high rate of consanguineous marriage, it even seems possible that families I and II may be related in some generation preceding those charted.

Discussion

Although phenylketonuria is rare in the general population, the disease has been found quite prevalent in certain special populations. In studies of patients in institutions for the mentally retarded, for example, Waites and Nicklas[5] found 21 phenylketonurics in 4,500 patients tested and

Berry[6] found six in 1100 tested. Jervis[7] studied 20,000 mentally retarded patients and found 161 cases of phenylketonuria. He further studied the 125 families of these patients and found 39 more cases (total 200). It is clear that in high risk populations, such as the mentally retarded or families of phenylketonurics, a higher incidence of the disease may be expected. This paper, we believe, is the first to report such a high incidence of the disease in a population outside of institutions.

Jervis found that in seven (5%) of the 125 families he studied, the parents were blood relations. This compares with the 0.5% incidence of consanguineous marriages which would be expected in a random sample. A high incidence of marriage between blood relations was also found in the group we studied, although it has not been established that any of the parents of the phenylketonurics were blood relations. In a small population in which consanguineous marriage is relatively common, it is not unusual to have a particular recessive trait appear in higher incidence than in the general population.

The community we studied, because of its religion and resulting social practices, tends to be relatively isolated from surrounding communities. This isolation may increase the value of the study of the genetics of phenylketonuria in the group. The community also provides an excellent opportunity for study of the value of the low phenylalanine diet. Future children born to members of the community can be tested for phenylketonuria and those found to have the disease can be started on the diet early. Their development can be compared with the development of previous children who did not receive the diet and also with the development of related children who do not have the disease.

Summary

In the course of a county-wide program of screening newborn infants for phenylketonuria, a community was discovered in which the rate of phenylketonuria was considerably higher than in the general population. This community, because of its religion and its lack of social intercourse with outsiders, is relatively isolated from the general community surrounding it. Consanguineous marriage is more common in this group than in the general population. The presence of a high rate of phenylketonuria within this isolated group offers a splendid opportunity for the study of the genetics of the disease and for comparison of the development of future phenylketonuric babies who will receive the low phenylalanine diet with past phenylketonuric children who did not receive this treatment.

Addendum

Since this paper was submitted in November, 1962, an additional six phenylketonurics have been found in this family complex: 14 months and 16 months (now on Lofenalac diet), four years, seven years, 68 years and 69 years. The 16-month-old, four-year-old and seven-year-old are siblings.

Acknowledgment

The assistance of Mr. Frank Hess of the Ames Research Laboratory, Elkhart, in the preparation of this report is gratefully acknowledged.

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Address presented before the Indiana Academy of General Practice, June 13, 1962, at Indianapolis, as part of the seminar on Viral Hepatitis co-sponsored by the Indiana State Board of Health and the Public Health Service, Communicable Disease Center.

Clinical Diagnosis and Management of Hepatitis Patients

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ON ANY DISCUSSION of a specific disease, it would seem appropriate to define the illness in question. This is relatively easily accomplished with almost every infectious illness; however, it has proven singularly difficult to develop a satisfactory definition of viral hepatitis. Perhaps the best available definition states that viral hepatitis consists of those forms of hepatitis caused by two or more hepatotropic, filtrable infectious agents not yet indentifiable by specific serologic methods, which produce systemic disease in man—accompanied often, but not always, by a characteristic type of liver injury. Thus, hepatitis as an etiologic entity is definitively recognizable only by its effects on the liver, a problem complicated by the fact that many individuals infected by the hepatitis viruses show no clinically evident manifestations of liver damage.

Therefore, from a public health standpoint, we may on occasion be faced with a fairly large number of individuals who are suspected of having this disease but in whom the final proof is lacking. Outbreaks have been described in which the largest proportion of the afflicted adult population demonstrated primarily gastrointestinal symptoms and children showed respiratory symptomatology; only the minority had specific signs pointing to liver disease. This is a point one must remember when one is faced with an epidemic of an ill-defined febrile disease affecting all ages, but most severely the adult, and whose clinical signs are those of an acute gastrointestinal upset. An epidemic of this type assumes particular significance if it occurs at a time when there are occasional cases of frank icteric hepatitis in the community.

How can one sharpen one's suspicions and diagnose infection with one of the hepatitis agents in the absence of readily apparent liver involvement? Experience has indicated that these diseases follow reasonably specific patterns, producing symptoms and signs in adults that are sufficiently unique to permit diagnosis with a high degree of accuracy even in the absence of any complicated laboratory procedures. In children, the mild anicteric illness is too variable to offer any concrete leads pointing to the diagnosis.

Specific Patterns

Let us then discuss the typical nonicteric disease in the adult. If the illness in question is infectious hepatitis, the patient will usually give a history of having felt excessively fatigued for a period of about a week. Then, he will rather abruptly develop an unusually severe headache and spike a temperature reaching as high as 103 degrees, often accompanied by chilly sensations but rarely by a frank chill. Aside from mild scratchiness of the throat and occasional cervical adenopathy, he will not demonstrate symptoms or signs referable to the respiratory tract.

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These investigations were supported in part by Grant AI—00998 of the National Institute of Allergy and Infectious Disease.

Shortly after the temperature elevation is first noted, the patient, if he is a smoker, will lose the urge to smoke and will almost invariably stop this habit entirely. In addition, if he has been taking any alcoholic beverage within this time period, he will note that even small amounts of alcohol will cause a marked—and for him unpredictable —effect and that a hangover will usually follow the intake of even a moderate amount of alcohol.

Just following or accompanying the fever, the patient will notice a progressive loss of appetite for specific foods, especially those which are heavily spiced or which contain a large quantity of fats derived from plant sources such as shortening. He will complain of feeling excessively gassy at this point and may experience several mild bouts of diarrhea, with or without vomiting, alternating with constipation. Within three to six days of the onset of fever, his temperature will usually return to normal; and about this time, the patient will begin to experience an increase in fatigability of a quality difficult to describe but more severe than that found with other mild infectious diseases.

Most individuals describe it as, "I feel as if my engine had stopped;" and they develop a general apathy and lack of interest, plus a type of irritability which might best be called "general crabbiness." The crabbiness is much more pronounced in women than in men and is often so striking as to permit the diagnosis of hepatitis without much further ado. Parenthetically, it might be added that in one area where we studied an outbreak of adult hepatitis, a considerable increase in the divorce rate was reported within the year after the outbreak had occurred. It is our opinion that this was due to the general crabbiness of the population.

Women show a number of additional signs and symptoms which strongly suggest the diagnosis of hepatitis. If the infection strikes at a time just prior to the onset of a menstrual cycle, it is common for this period to be abnormal. This may mean either severe and incapacitating cramps with minimal bleeding or prolonged and excessive bleeding in a person in whom this normally does not occur. It is of interest that the dysmenorrhea may continue to appear for the next several menstrual cycles, which also may be abnormal in other ways. Women will note that they are developing acne-like rashes confined chiefly to the face. They will note excessive oiliness of the skin and the fact that hair loses its normal luster. Permanent waves do not take, and even setting the hair becomes impossible.

All the events that I have enumerated occur with serum hepatitis as well as infectious hepatitis except that the serum disease is not usually marked by a temperature elevation above 101°. Additionally, in the serum disease, the complaint of fatigue may be present for several weeks prior to the onset of gastrointestinal symptoms and migratory joint pain and swelling occur with some frequency very early.

Lab Tests Useful in Early Diagnosis

It is of importance to remember that all these signs and symptoms occur with great consistency in patients who demonstrate no jaundice. As with so many other things in medicine, nothing is as important as a good history because physical examination in these mildly involved patients is often negative—particularly if it is performed early in the course of the illness. Occasionally, liver tenderness can be elicited by heavily percussing the lower rib cage. A patient who has liver involvement will complain not only of discomfort following this procedure but will also usually become nauseated. Within 10 to 15 days of onset, the liver may be sufficiently enlarged to be palpable, but this does not invariably happen. Tenderness always precedes enlargement.

One relatively simple laboratory test will be abnormal even in these mild cases. This is the urine urobilinogen examination. With a little bit of practice it becomes easy to detect an abnormal intensity of the red color which develops following the addition of Ehrlich's reagent to a small urine sample. The only equipment necessary is a test tube with a mark at the 2.5 ml. level and a dropper or pipette also with a mark indicating a volume of 2.5 ml. The test consists simply of placing 2.5 ml. of urine in the test tube, adding 2.5 ml. of Ehrlich's re-

agent, and then 5 ml. of a solution of sodium acetate. A color develops within a minute or two, and its intensity is proportional to the amount of urobilinogen excreted.

The most sensitive test in the early phase of a mild non-icteric hepatitis is the serum transaminase determination. Serum transaminase levels in early hepatitis are always elevated, and a diagnosis of this disease cannot be sustained in the absence of a marked rise in the enzyme. The lowest levels that we have observed in proven cases of hepatitis have been around 200 units; the usual increase is in the range of 500 to 2000. Bromsulphalein (BSP) excretion also is usually impaired quite early, often in the preicteric period; but in early hepatitis, this particular determination is not as reliable an indication of liver inflammation as the transaminase level. The flocculation tests show trends too variable to be useful for the diagnosis of early hepatitis.

Rest and Food Best Therapy

It should be emphasized that there is no specific therapy for hepatitis. Unfortunately, in the United States as a whole, most cases of this disease are woefully overtreated, something which is not only expensive but often does the patient physical harm. For almost all cases of hepatitis, treatment should consist only of rest and an adequate caloric intake. Rest means bed rest as complete as possible. Caloric intake means calories provided in any form in which the patient prefers to take them, excluding only alcoholic beverages. The appetite is often fickle; if the patient wants to eat pickles all day, give him pickles. There is no evidence that special diets are of any benefit. Patients with hepatitis can usually eat more at breakfast than at any other time of the day. It is therefore worthwhile to reverse the usual sequence of meals and to serve them dinner shortly after they awake in the morning.

No drugs of any sort should be used for symptomatic relief of anorexia, vomiting, irritability or malaise. Almost every pharmacologic agent useful for these purposes has proven toxic to liver tissue. Tranquilizers and antiemetics particularly should be avoided. If the patient has considerable pain from dysmenorrhea, the safest analgesic to use is Demerol. Pyribenzamine often effectively controls the nausea. Gamma globulin is useless in treatment of this disease; liver extract injections and antibiotics are contraindicated; vitamin supplementation of the diet is worthless; and to employ corticosteroid therapy in the average mild or even moderately severe cases of hepatitis is, to say the least, poor medical practice.

When is steroid therapy indicated? This is a problem which has never been adequately resolved. While some investigators accept the fact that the use of steroids in pre-comatose and comatose cases of hepatitis has proven life-saving, other equally reliable researchers feel that no lives have been saved by the administration of these hormones. It is true that the steroids act as cholagogues; the bilirubin level falls shortly after the initiation of therapy. We are obviously not interested in treating the patient's jaundice, but we are concerned with preventing liver damage and its long-term consequences. The use of these compounds results in a rapid initial improvement in such subjective complaints as anorexia and malaise, but again without benefiting the liver inflammation.

I believe the only indication for steroid therapy is in the comatose or pre-comatose individual, although it must be granted that no statistically valid evidence exists that even here benefit is achieved by the administration of these agents. The reason that the steroids should not be used in the ordinary case of hepatitis, despite the subjective improvement obtained, is that the treated patients have demonstrated a marked increase in the incidence of prolonged and chronic hepatitis, as well as in the incidence of relapses. Relapses are far more dangerous to the ultimate well-being of the patient than the initial attack itself.

In the pre-comatose or comatose patient, other therapeutic measures may prove to be of benefit. When symptoms such as marked lethargy develop, the protein content of the diet should be reduced temporarily since there is adequate evidence to indicate that excessive protein may be deleterious at this

time. The administration of oral Neomycin to suppress intestinal bacterial flora also appears to be of benefit. If the patient develops signs of bleeding and the plasma prothrombin level is impaired, vitamin K-2 oxide is administered—not menadione. There is no need to give this vitamin as a routine measure. Impending coma is the only situation in relation to hepatitis in which either a specific diet, drug, or antibiotic is of value.

Prognosis Excellent

What are useful guide posts in following a patient with known viral hepatitis? In children, the disease is almost always so transient and mild that the child can be allowed to set his own rate of mobilization. In an adult, the duration and severity of viral hepatitis is quite unpredictable. The mortality rate is exceedingly low, except in pregnant women and individuals with preexisting liver damage. In general, therefore, the prognosis for ultimate recovery is excellent. The height to which the bilirubin or transaminase levels rise is not an indication of the severity of illness. However, a patient who continues to be anorectic and whose transaminase level persists at a level of a thousand units or more for periods in excess of 10 days or so is probably headed for a relatively prolonged course. Needless to say, there are exceptions to this also.

Generally, once the transaminase level begins to fall, it usually returns to the range of 200 units or less within a week or 10 days. At about the same time, jaundice will disappear slowly. The liver will become less tender, although it may stay enlarged. The flocculation tests reach a peak at about this time. Once the transaminase level has fallen below 200 units and the jaundice has disappeared, bromsulphalein excretion becomes the most reliable index of the patient's recovery. This determination can be used to indicate when the patient should be mobilized and whether or not his rate of mobilization is too rapid. In general, mobilization of a patient as long as his BSP retention is above five percent (and the level is still falling) will be followed by a relapse in a relatively high proportion of patients.

Our own policy is as follows: As soon as a patient no longer appears jaundiced clinically even though his serum bilirubin may still be elevated, BSP tests are done on a weekly basis. When they have fallen below five percent retention, the patient is gradually mobilized. He is followed at intervals of three to four days with repeat BSP tests and with daily palpation of the liver. If this organ becomes increasingly tender or a rise in the BSP level is noted, the patient is returned to bed rest until the dye excretion has again returned to previous levels. As far as palpation of the liver is concerned, it should be recalled that in many women the liver will enlarge and become increasingly tender toward the end of a menstrual cycle . . . in the absence of any increase in inflammation. This is due to fluid and salt retention secondary to the normal cyclic change in estrogen level.

If everything goes well, mobilization is continued until the patient has returned to reasonably normal activity. The BSP at this time is a relatively good indication of residual liver damage. If it is at a level of zero to three percent, it is very unlikely that the individual will have further trouble. Flocculation or turbidity tests are of no value as an index either of when to begin mobilization or as an assessment of residual liver damage.

Post-Hepatitis Syndrome

Many adults who have had hepatitis will continue to complain for periods of up to a year or more of a dragging sensation in the area of the right upper quadrant. They will have occasional transient enlargement of the liver that is particularly associated with relatively mild viral infections and various infectious gastroenteritides, which—especially in women—may be associated with transient periods of marked anorexia. Such complaints do not necessarily indicate that the patient has chronic or prolonged hepatitis. In fact, what he has is the post-hepatitis syndrome.

Characteristically, these individuals have a history of hepatitis followed by complete recovery but then on repeated occasions develop anorexia, irritability, lethargy, weakness, headaches and right upper quadrant

discomfort. Women frequently show menstrual disturbances of various types. Sometimes the liver is enlarged and tender. In very few of these patients are jaundice or abnormal hepatic function tests present. The difficulty of correlating these marked subjective signs with objective evidence of hepatic disease by biopsy or in the laboratory has been recognized. As I indicated earlier, the post-hepatitis syndrome occurs more commonly and more severely in women and may be almost incapacitating for them. While there is a tendency to write these complaints off as being due to crankiness, it may be stated with certainty that such an attitude is unjustified. The basic problem is that the woman's estrogen metabolism has been upset.

Detoxification and excretion of the various sex hormones are accomplished to a large extent in the liver. During and following hepatic disease, these functions become deranged; and women, who depend far more on these hormones for their general well-being than men, suffer more as a consequence. In general, the symptoms of the post-hepatitis syndrome are due to low estrogen levels. Excellent results can usually be obtained by treating the patients with cyclically administered oral estrogen as follows: give estrogen for about 18 days, adding a progestational agent during the last four or five days of the cycle, and then abruptly withdrawing both hormones. Menstrual bleeding will usually start within a day or two following withdrawal of the drugs.

After permitting the woman to bleed for about seven days, estrogen administration is again started. Unfortunately, this form of therapy is expensive since best results are obtained with the newer hormones. Stilbestrol, while more economical to use, is also much less effective. Following administration for two or three cycles, these agents can usually be withdrawn and the patient's well-being will persist. The male suffering from the post-hepatitis syndrome is much more difficult to treat. Androgen administration has not been of benefit and should not be used. Similarly, while it may be tempting to employ tranquilizers to calm down an irritable patient, they have an erratic action with frequent aggravation of symptoms. The best approach consists of reassuring the patient that he will feel well within a month or two and to see him at intervals, primarily for his own reassurance that nothing is fundamentally wrong.

The question is often raised as to the incidence of permanent residual damage following hepatitis. Unquestionably, no adult who has this disease escapes without some permanent damage. On the other hand, chronic progressive liver disease ending with cirrhosis, portal hypertension, or death appears to be exceedingly rare. Exceptions are noted for people with preexisting liver damage and for patients who, because of habit or employment, continue to be exposed to potent liver toxins, such as alcohol, petroleum products and other hydrocarbons of a similar nature.

Illnesses Mimicing Hepatitis

In the past several years, we have seen outbreaks of illnesses resembling classic hepatitis in their clinical and laboratory manifestations but which must have been due to agents other than the two associated with infectious and serum hepatitis. For example, we saw one epidemic among student nurses in a hospital in the Midwest where an incubation period of approximately seven through nine days could be clearly delineated and where, while liver involvement and even icterus were present in most patients, the illness was so mild and transient as to be strikingly different from the classic form of hepatitis. For example, the patients with jaundice did not show any appreciable weight loss, although in the usual case an adult loses at least 10 to 15 pounds. In addition to that, all affected individuals recovered within five or six (in some cases 10) days following the onset of their illness.

The short incubation period, as well as the consistently short and benign course of the clinical illness, effectively rule out the diagnosis of either infectious or serum hepatitis in the classical sense, even though the clinical laboratory findings did not differ from those usually observed with the latter two diseases. During the course of any year, we see in our clinic population a fair

number of individuals who demonstrate similar peculiar illnesses for which no clear-cut etiologic explanation is at hand. This particular form of hepatitis appears to be more infectious than the classical one and will spread within a family unit even though gamma globulin has been given to all contacts as soon as a diagnosis is suspected. These observations indicate that viruses other than the two usually considered are capable of producing primary liver inflammation in adults, a fact which has for several years been recognized to apply in congenital hepatitis.

Neonatal Hepatitis

Congenital hepatitis is occurring, or is being recognized, with increasing frequency in all areas of the United States. This subject, therefore, is worthy of some discussion. It is now known that this is not a disease but rather a syndrome due to multiple etiologies. At least four viral diseases that may be congenitally transmitted affect the liver of the newborn infant sufficiently to give rise to the signs and symptoms of neonatal hepatitis. These illnesses are cytomegalic inclusion disease, generalized herpes simplex infection, Coxsackie B virus, and serum hepatitis. Coxsackie and herpes infections are relatively rare and usually produce more generalized disease with involvement of many organs and tissues, although the effect on the liver appears to be especially marked.

There is no evidence that the agent causing epidemic or infectious hepatitis causes clinical illness in the fetus or congenital disease in the newborn. Many women who developed hepatitis during their pregnancy have been carefully observed, and none of their infants were adversely affected nor was there an increase in the incidence of congenital anomalies. On the other hand, the ability of the serum hepatitis virus to cross the placental barrier and to cause disease in the newborn is well established. Characteristically, the majority of mothers of infants with this congenital disease fail to show signs and symptoms of liver involvement and thus represent asymptomatic carriers of hepatitis B virus. It is unfortunately true that these women generally tend to infect several of their offspring successively, although an occasional one may escape unharmed.

The clinical picture of hepatitis in the neonatal period is that of an obstructive jaundice with whitish or grayish stools and bile but no urobilinogen in the urine. The liver is usually enlarged, the spleen only occasionally. Because of the marked clinical picture of obstructive jaundice, the diagnosis of biliary atresia or other forms of congenital biliary obstruction is usually considered. Unfortunately, laboratory tests are of little value in differentiating obstructive from inflammatory disease in infants. Flocculation tests, alkaline phosphatase, and the serum enzyme determinations give unpredictable results in this age group. Only a liver biopsy performed under local anesthesia will provide the answer unless the patient spontaneously improves, which, of course, rules out atresia.

It should be emphasized that infants with liver disease tolerate general anesthesia very poorly, and the mortality rate following its administration is exceedingly high.

Infants with congenital hepatitis caused not by the herpes virus but by the agents that I mentioned usually recover. A variable percentage, estimated as high as 25%, develops cirrhosis in early childhood and succumb from this; but the majority (more than two-thirds) appear to do well. Because of this high rate of recovery from hepatitis and the high mortality following surgical intervention, it is particularly important not to subject these patients to surgery in an ill-advised attempt to correct a non-existent biliary atresia.

Immune Globulin Prophylaxis

While there is no specific therapy for hepatitis, an exceedingly effective method of prophylaxis exists. This is, of course, immune globulin, also called gamma globulin, about which there now is a great deal of valuable information on which concrete recommendations can be based. As far as liver disease is concerned, this biologic is effective only against the virus causing infectious hepatitis. There is no evidence to suggest that the material prevents serum hepatitis. The recommended dose of im-

mune globulin in the prophylaxis of infectious hepatitis is 0.01 ml. per pound of body weight. For practical purposes, one usually gives 1 ml. to children under 100 pounds and 2 ml. to older children and adults. This dose is adequate to prevent the occurrence of hepatitis in approximately 90 to 95% of persons to whom it is administered prior to the onset of symptoms.

Almost all failures that do occur are due to the fact that the injection was given too late in the incubation period, namely, just prior to the onset of symptoms. To be effective, it is essential that the material be administered at least five to seven days prior to the onset of illness. Since the incubation period of infectious hepatitis is approximately three weeks, this does allow the physician ample time for proper diagnosis of the index case before the material need be administered to family contacts. There have been reports in the literature suggesting that the dosage here recommended is too low. These reports are based on abnormal conditions and deal with a hepatitis virus which differs in some ways from the agent encountered in open communities. All data collected in naturally occurring outbreaks indicate that the 0.01 ml. per pound dose is adequate and that nothing is gained by giving more.

It is important to note that immune globulin never contains the virus of serum hepatitis, since the chemical manipulation of plasma necessary for globulin precipitation either destroys or precipitates the serum hepatitis virus in a different fraction. As a matter of fact, any reactions to gamma globulin administration, other than pain, are rare if the material is injected by the only acceptable route, namely, intramuscularly. Immune globulin must never be given intravenously, even in dilute form. Severe, and sometime fatal, reactions have occurred following this type of administration.

Recent Laboratory Work

In conclusion, I would like to discuss with you some of the recent work aimed at isolating in a laboratory system the agents responsible for human hepatitis. Ever since it was shown—at about the time of the second World War—that human hepatitis was due to several viruses, the search has been on to develop a laboratory method for the propagation of these agents. Initially, animals were used. This work was completely unsuccessful. It was found that many mammalian and avian species carry hepatitis viruses of their own which usually proved species specific. In other words, the virus that produces hepatitis in the dog is unable to produce a similar disease in man and vice versa.

Then, when tissue culture methods became available, attention was focused on attempting to grow the viruses in cells in test tubes. This has proved to be a singularly difficult, disappointing and confusing task. The first report of a possibly successful propagation of the infectious hepatitis virus described the agent's growth in chick egg embryos. The authors used the fluid from the egg as a skin test antigen to determine immunity to this virus. Material taken from the infected eggs did in fact on occasion produce a transient clinically evident and laboratory demonstrable form of hepatitis in human volunteers, but this action was far from constant. This virus eventually died out and could not be propagated further. Subsequent reports of the isolation of the infectious hepatitis agent in tissue culture and/or chick egg embryos could not be confirmed.

In 1956, a group reported the successful cultivation of cytopathogenic agents from patients with clinical hepatitis in a special cell line known as Detroit-6. The agents thought to produce this effect were unique in many respects. The culture system, as originally defined, required elaborate precautions; and perhaps because of this, there were a number of reports of unsuccessful attempts to reproduce the results. The tissue culture was considerably refined in succeeding years; and in September, 1961, the same group presented a comprehensive report covering studies carried out in the virology laboratory and a number of clinical trials in which a group of volunteers received these agents. The results can be briefly summarized. The administration of the tissue culture fluids to human volun-

teers produced, with reasonable consistency, a mild illness. This illness was occasionally accompanied by low-grade fever and by jaundice as well as by changes in the liver chemistries. These changes resembled those found with the naturally occurring disease.

There were, however, several features which are disturbing. In the first place, the virus in question was originally isolated only from the serum of the initial patients. This in itself is not too unusual since the virus of infectious hepatitis does produce a viremia; however, no disease occurred when the tissue culture material containing the virus was fed to volunteers. It is known that the primary spread of the infectious hepatitis virus is via the alimentary tract; yet, infection in volunteers could only be produced if the agent were injected parenterally. The incubation period of the experimental disease was also longer than that normally seen with infectious hepatitis; it averaged consistently more than 30 days. You will recall that the incubation period of the natural epidemic disease is approximately 21 days and that for serum hepatitis, the incubation period is at least 45 days. The duration of viremia in the volunteers was longer than one would expect to find in patients with infectious hepatitis. Another feature which I find disturbing in the analysis of these data is the fact that the attack rates among the volunteers receiving the material were higher than one would expect. It is well known that the great majority of young adults have had hepatitis in the past whether they have a clinical history of infectious jaundice or not.

Hepatitis Vaccine Still in the Future

What does all this add up to? I believe one can say that this particular group of investigators has isolated several agents that are related to each other but probably serologically distinct. These agents have been demonstrated to produce transient liver inflammation in human beings following parenteral injection. They may be dealing with an atypical serum hepatitis-like virus. There is no evidence that these agents are in fact the one or ones responsible for epidemic infectious hepatitis as we see it in the country at large. This particular point requires a great deal more evidence than is available at the moment. Certainly, there is no justification for what has appeared in the lay press, which generally interpreted these data as indicating that a hepatitis vaccine was just around the corner.

It should be mentioned that in the past year other investigators have reported the recovery of cytopathogenic agents from patients with infectious hepatitis and from plasma known to produce serum hepatitis. But in these studies, the evidence that the viruses are in fact related to the disease in question is even more tenuous than in the investigations that I have cited in detail. We are, therefore, only at the beginning of this work. It will prove extraordinarily difficult to establish clearly the relationship of any agent isolatable by laboratory means as one of the several causes of human hepatitis. Certainly, even talk of a successful vaccine should be postponed until the time that these etiologic relationships are fully understood. ◄

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Presented before a two-day medical symposium of general physicians at Rochester General Hospital, Rochester, N. Y., Sept. 14-15, 1962.

Tranquilizing Drugs, Alcohol, and the Physician's Responsibility

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THE GROUP OF DRUGS known as tranquilizers have become widely used throughout the U. S. since 1955. The quantity of tranquilizers used rivals the combined amounts of antibiotics prescribed to the public, although they are not considered life savers as are the antibiotics. This group of drugs has after centuries turned the key in the locked doors of the mental hospitals. A surge of research and interest in mental disease has blossomed. With their help there has been a great exodus of patients from public mental hospitals throughout the land which could not have been accomplished without their use. A state mental hospital[1], administrated by the author for more than ten years, has had a patient census drop of nearly 20% during the last seven years, while at the same time the admission rate has risen almost 100%. This trend is not unique with this one hospital. The same report comes from hospitals in every state.

These drugs have also become widely used in private practice. In fact, their use is not limited to the psychiatrist. The general practitioner, the surgeon, the internist and other specialists prescribe them widely for many ailments. The author recently made a survey of 1,000 consecutive prescriptions in each of six southern Indiana drug stores. It was found that the prescription of tranquilizers ranged from 8 to 33%, with an average of 15% of all prescriptions filled. Private physicians in the larger cities and more sophisticated communities prescribe tranquilizers even more. Thus these drugs have become widely accepted by the physician and sought after by the public.

The purpose of this paper is to point out and warn of some of the dangers and hazards of these drugs, and also to call the physician's attention to his responsibility in prescribing them for his patients. Smith, Kline & French advise that Thorazine prolongs and intensifies the actions of many central nervous system depressants such as anesthetics, barbiturates and narcotics.

Legally Sober, Clinically Drunk

In 1958, the fourth year after tranquilizers had come into wide use, an Indiana State Police sergeant[2] reported to the author that traffic officers had made a few arrests of traffic violators who appeared to be clinically drunk but were found to be legally sober as tested by laboratory methods. Further questioning revealed that the violators were taking tranquilizers. This police sergeant, who was the director of a police laboratory, asked for help in solving this riddle.

Greenhouse and Pilot[3] had reported earlier that they had treated alcoholics with reserpine. Some of their patients admitted to some drinking while taking reserpine. These subjects thought that they received a more powerful effect when under the influence of both the drug and alcohol than from the alcohol alone.

In 1958 our own hospital was releasing scores of mental patients on maintenance doses of tranquilizers, many of whom went

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on to operate automobiles and other complex machinery. Furthermore, all of them had access to alcohol. We suspected that there probably was a potentiating effect of tranquilizers upon alcohol. Investigation revealed that there was very little in the literature on the subject. Thus, we felt that we should make a study to see if the suspicions of the state police were correct and also for our own information. We found that most research in the field on the effect of alcohol on human behavior was largely based on reflex action. Doctor Zirkle,[4] our consulting psychologist, designed eight laboratory tests to measure coordination and judgment so that very slight alterations could be measured with some accuracy. With the assistance of Dr. Zirkle and other members of our staff and with the director of the Indiana State Police laboratory performing our blood alcohol determinations, we set out to show just what, if any, was the relationship of alcohol with certain tranquilizers when taken together.

A Blind Procedure

Since chlorpromazine was the most frequently used tranquilizer in our hospital, it was selected for our initial investigation.[5] Twenty-four healthy volunteers were obtained. A daily dose of 200 mgm of chlorpromazine was administered blind to them for a period of one week to establish a working condition. A sufficient amount of alcohol was administered to produce a blood alcohol level of approximately .05%. Four experimental conditions were provided: Tranquilizer, alcohol, placebo, tranquilizer plus alcohol. The procedure was blind in that the subject was never informed what he was taking prior to each experimental session.

A study of the results indicated that the subjects made their best score on the eight tests designed to measure coordination and judgment in the placebo condition. There was a slight impairment when taking 200 mgm of Thorazine alone and somewhat more with alcohol alone. However, scores on the tests were significantly more impaired when the subjects were taking both Thorazine and alcohol.

Meprobamate[6] (Equanil, Miltown) was used for the second study since this drug is very widely used in private practice and to some extent with hospitalized psychotics. Again, 24 healthy volunteers were selected and were aware that they would take meprobamate and alcohol but unaware of the order of administration. A dose of 400 mgm, q. i. d., was given for one week prior to the tests. A blind procedure employing a placebo was also followed in this study. The same blood alcohol level of approximately .05% was attained, as measured by a Breathalyzer.

The results of this study showed that test performance was best with the placebo condition. There was a slight impairment of performance with meprobamate alone, and a still greater impairment with alcohol alone. There was a most marked impairment of performance with the combination of alcohol and meprobamate. In fact, four of our subjects when exposed to the combination of meprobamate and alcohol were grossly drunk.

Drugs + Drink = Disaster

The editor of a west coast paper wrote us that his physician started him on Miltown (meprobamate) for his nerves. He went home from his office at 3:00 p.m. and took a couple of highballs, definitely not enough to intoxicate him, so he states. However, with the combination of his first few doses of his new medicine, he passed out completely and could not be aroused until eight hours later and then learned that he had been considered a suicide suspect. This man urgently recommends that patients be forewarned of possible trouble when one drinks "on top of meprobamate." A lawyer from Louisiana also wrote us to warn our patients taking meprobamate to not drink. He stated that while taking meprobamate for his nerves he got on what he called a "big drunk" from a little whiskey.

Murray[7] reports that he has observed that Librium has a hidden effect on some patients. He finds that it liberates the patient from his normal tonic anxiety protective mechanisms which in turn may cause changes in personality, sometimes

far-reaching and disastrous. He reports a 54-year-old man who was suffering from a chronic depressive disorder with marked anxiety components. After taking a maintenance dose of 75 mgm of Librium for 90 days, he showed objective and subjective improvement. However, certain personality changes resulted in multiple conflicts with traffic officers as well as conflicts with his employer. An ophthalmological examination revealed eye muscle imbalance and poor depth perception. After discontinuing Librium for seven days his responses were normal.

Psychological Plaster Cast

Apparently, however, doses of Librium of 25 to 30 mgm daily do not bring about a change in depth perception. This case reminds us that good authority recommends that the prescribing physician should be slow to suppress the patient's presenting symptom until he is willing to deal with its origin. Failure to do this is to place a psychological plaster cast on a fractured personality.

Murray reported that 68 drivers taking "Methaminodiazepoxide" (Librium)[8] in adjusted maintenance doses of 10 to 100 mgm daily over a 90-day period had 10 minor and six major road accidents. This was 10 times as many accidents as would have been predicted by the statistical section of the highway department. He concludes that these accidents were not due to spinocerebellar dysfunction, but due to changes in driving habits resulting from psychological effects of the drug. Murray says that patients prescribed Librium should be warned of the possible deterioration in their driving safety, resulting in danger both to themselves and to others. Murray has referred to this impairment in Librium as removing the patient's natural anxiety, thus making him accident prone, etc.

A medico-legal aspect comes out when a person commits a criminal act while taking tranquilizers, since certain tranquilizers in combination with small amounts of alcohol result in seriously impaired judgment.

Murray[9] reports the study of a man who committed murder while taking Librium. He testified that in all probability he had less control due to the drug.

The author of this paper reviewed the verbatim court proceedings of the trial of a professional man who committed a major crime while under the influence of alcohol and large doses of meprobamate. The prescribing physician had not warned him of the possible potentiating effect of the two drugs in combination.

Based on our experimental conclusions[5, 6] "that human performance and judgment suffer deterioration in significantly greater degree from the combined ingestion of meprobamate and small amounts of alcohol than from the same amounts of each taken singly" the author of this paper concluded that the accused being under relatively large amounts of meprobamate and alcohol during and at the time of the alleged criminal act, was suffering from impairment of judgment. His judgment may have been impaired to the point of lessening his ability to distinguish right from wrong or to adhere to the right. Furthermore, if the accused had previously received no information or warning that meprobamate has the effect of increasing the action of alcohol, the combined effect thus produced would have been greater than he could have anticipated. At least part of the drunkenness produced would have been "involuntary." A man is considered to be responsible for his acts during voluntary drunkenness.

Physician Must Give Warning

All physicians who prescribe chlorpromazine and meprobamate, and probably all tranquilizers, should warn their patients not to drink while taking the drug. To lessen his legal obligation, perhaps his prescription should require the pharmacist to inscribe on the label "do not drink alcoholic beverages while taking this drug."

The prescribing physician must examine his own medical experience in every prescription he writes. He must only after deliberation come to the conclusion that "this drug I am about to prescribe will do more for my patient than any other drug I know about."

The prescribing physician must use drugs from only reliable and ethical phar-

maceutical houses. He should be certain that the drug has had ample laboratory and clinical testing and he should be familiar with the known reactions of the drug as well as being alert to observe new reactions and watch for any idiosyncrasies his patient may manifest. Drugs that are known to impair judgment, coordination, driving ability or increase the action of alcohol should have special scrutiny. When the physician follows this procedure there will be less tendency toward political control in the private practice of medicine.

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Cancer in Children

Dr. Harold W. Dargeon, writing in *CA*, cancer journal for clinicians, reported that last year more than 4,000 children under 15 died of cancer.

"The fact that cancer now occupies a high place as a cause of death among children from one to 14 inclusive, is a challenge to workers in the field of child health," he said, adding: "In 1961, more school children succumbed to cancer than to any other disease."

It was his conclusion that most childhood cancers are treated late. —Reprinted from *The New Physician*, August, 1962.

Active Duodenal Ulcer in Children

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THE ACUTE PEPTIC ULCER, similar in method of production to the chronic ulcer, although thought uncommon in children is actually more common than was formerly supposed. The lesion occurs most often in atrophic infants in the first year of life, especially between the ages of two and five months, in association with digestive disorders. After the first year duodenal ulcers are more often of the chronic variety.

It is one of the causes of melena in the new born infant. Duodenal ulceration sometimes occurs epidemically and has been thought to be dependent upon the action of the viridans group of streptococci. It may accompany extensive cutaneous infection or burns, nephritis and various contagious and febrile disorders. In some cases it complicates meningococcic meningitis, and meningococci are found in the lesion.

Pathology

The ulcer is usually single, although two or more lesions are not infrequently found. If chronic, the ulcer has sharply defined edges, as does the gastric ulcer, and is situated generally on the posterior wall of the duodenum. The ulcer may involve only the mucous membranes or may extend to the serous layer and may even perforate the intestinal wall. Sometimes the ulcer may be small and is easily concealed by a fold of mucous membrane.

Clinical Manifestations

In many cases, symptoms are entirely lacking, and the condition is identified only at autopsy. In other instances there may be a sudden fatal collapse, indicating the possibility of a concealed hemorrhage or an intestinal perforation. At any age, hematemesis and the passage of blood by bowel are suggestive symptoms of duodenal ulcer, when they otherwise cannot be accounted for.

The blood may be large in amount and bright red, or it may appear as coffee ground vomitus or tarry evacuations. Laboratory tests for occult blood may indicate slight or periodic gastrointestinal bleeding. In older children there may be pain and tenderness in the region of the duodenum. The pain is usually relieved by vomiting or by the ingestion of food. Sometimes the symptoms suggest pyloric stenosis, probably because there is pylorospasm produced by irritation from the ulcer.

Differential Diagnosis

In diagnosis, it must be ascertained whether blood has entered the stomach from outside sources such as the nose or mouth, or in nursing infants from the nipple of the mother. Other causes of melena must be sought. Roentgenograms may show the characteristic signs in the duodenum. Sometimes acute duodenitis occurs without ulceration, and the roentgenogram may show poor filling and rapid emptying of the duodenal cap. Treatment of an acute duodenal ulcer in a child is similar to that in adults using reduced dosage of drugs.

Case Histories

Case No. 1: A well-developed, well-nourished seven-year-old white female began complaining of abdominal pain and nausea in May, 1962. At this time the stool was negative for occult blood after she was on a meat-free diet for three days. The youngster emphasized over a period of six weeks that ingestion of milk would relieve the abdominal pain. The patient was treated with Trisogel, Amphojel and mild sedation. She was examined in the office on June 20, 1962. At that time her stool specimen re-

vealed occult blood and she was immediately hospitalized. Roentgen examination showed an active duodenal ulcer. However, the unusual aspect of this case was that the stool specimen was negative for blood throughout the hospital stay. She was released on July 1, 1962 with a diagnosis of healed duodenal ulcer. She continues the use of an ulcer diet. No medication is required.

Case No. 2: A well-developed, well-nourished white male, age nine years, began complaining of abdominal pain and nausea. On June 8, 1962 he was examined at the office and treatment was begun. He lost nine pounds during the next six days. His stools were positive for occult blood. He was admitted to Clay County Hospital. Roentgenographic study revealed a very active duodenal ulcer. He improved on hospital management and was discharged on June 22. He continued ulcer medication for three weeks and is now on an ulcer diet only.

Case No. 3: The brother of case number two, 18 years of age, developed acute abdominal pain when the nine-year-old returned home. After two days of vomiting and associated nausea a stomach roentgenogram revealed an acute active duodenal ulcer. He improved rapidly on diet and medication and hospitalization was not necessary.

Summary

Active duodenal ulcers probably occur more frequently in children than is generally recognized. Difficulties in eliciting symptoms in infants and children probably accounts for the fact that only the more acute and severe ulcers are diagnosed. Since the mild ulcers escape detection the serious complications of perforation and hemorrhage appear to occur more often in children than in adults. The treatment of the ulcer and its complications is the same for children as for adults. ◄

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The Hazards of Responsibility

You, doctor, are responsible for the great advance in medical care. In congratulating yourself on the lessened morbidity and mortality of your patients, however, don't forget you are also responsible for the hazards of employing such potent therapy.

You can't transfer this responsibility to the pharmaceutical industry as certain professors have attempted to do in testifying before the Senate Subcommittee.

You may, however, see this responsibility transferred to Federal or state government by default unless you exercise your franchise as a citizen and become more active politically.—George E. Farrar, Jr., M.D., in *Resident Physician*, Feb. 1963.

Presented as part of a symposium on "Trauma" before the ISMA Convention, October 7-10, 1962, French Lick, Indiana.

Resuscitation in the Acute Respiratory Emergency

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THE PRINCIPLES and practice of resuscitation in the acute respiratory emergency are relatively simple. They can be taught to any physician in the time that he would take to play nine holes of golf. Despite this fact, many physicians have surprising difficulty during this type of emergency, when they may be of less value to their patient than a well trained first-aid layman.

Anesthesiologists spend most of their working hours administering drugs which render their patients unconscious, and depress, if not abolish, the normal respiratory mechanism. To offset these insults, they are compelled to resuscitate their patients throughout the anesthetic. No other physicians can vie with anesthesiologists in their experience with respiratory resuscitation. The anesthesiologist, therefore, is frequently invited to offer his skill and experience when an acute respiratory emergency arises.

However, this is not sufficient. He may not be immediately available when he is most needed. His contribution to the community should include instruction of his colleagues, so that they can act promptly and efficiently in his absence. Artificial respiration, like any other technical procedure, is best understood following a practical demonstration. Since it is carried out daily in the operating room, the principles and practice of artificial respiration can be readily demonstrated. The time expended in acquiring the skill would be rewarded amply if it resulted in the salvage of just one apneic patient.

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The first concept which must be fully appreciated concerns the airway. This term refers to the anatomic passages which oxygen must traverse to reach the alveoli of the lung. It includes the nasal and oral cavities, the pharynx, the larynx, the trachea, the bronchi and its subdivisions. An obstruction of the airway will mitigate the effectiveness of any technic of artificial respiration until it has been overcome. When the obstruction is incomplete, ventilation may be inadequate and when it is complete, no oxygen will reach the alveoli.

Airway Obstruction

When an individual loses consciousness the pharyngeal and mandibular muscles relax, and the mandible, to which the tongue is attached falls backwards. The base of the tongue will then partially or completely occlude the laryngeal inlet. This is the most frequent cause of airway obstruction in the unconscious patient, and usually the simplest to remedy. Extension of the head and forward traction on the mandible enlarges the pharynx and pulls the tongue away from the larynx. Occasionally it will be necessary to utilize mechanical devices, such as oropharyngeal or nasopharyngeal airways, to facilitate the maneuver. It is only in the rare instance that an endotracheal tube must be inserted into the trachea to overcome this type of airway obstruction.

The basic rule in emergency respiratory resuscitation is to supply oxygen to the lungs as rapidly as possible. Irreparable cerebral damage from hypoxia may occur within a few minutes of the cessation of spontaneous respiration. Even when an experienced physician is present, particularly

in the tense atmosphere of an emergency situation, endotracheal intubation may be difficult and time consuming. If it can be avoided until the patient has been well oxygenated and the critical period has abated, the patient will gain valuable minutes in the restoration of oxygen to his vital tissues.

Hypopharyngeal tongue obstruction is not the only cause of airway obstruction. Foreign bodies, including vomitus, blood and secretions, and tumors may occlude the passage above the larynx. Edema, tumors or direct injury to the laryngeal cartilages may close the laryngeal inlet. Below the larynx the trachea and bronchi may be compressed from without by tumors, or their lumina occluded by secretions, foreign bodies, tumors or spasm of the bronchial muscles. If the site of the obstruction lies above the carina, and the measures which have been described are of no avail, then a tracheotomy must be performed rapidly. If the obstruction is partial, then intermittent positive pressure ventilation may allow some oxygen to pass, and should be attempted during the tracheotomy.

The manual methods of artificial ventilation, such as the Sylvester and Holger-Nielsen technics, which have been accepted for many years, are now passé. In 1951 Gordon and his co-workers[1] demonstrated that some of these methods yielded adequate ventilatory volumes. Unfortunately, this highly publicized investigation overlooked one simple factor: each of the volunteers had his airway protected by the presence of an endotracheal tube. Recent re-evaluation of the previously recommended methods of manual artificial respiration by the same group of investigators, has demonstrated that, in the absence of an endotracheal tube, airway obstruction was so frequent that they were all inefficient.[2]

The simplest and most expeditious method of providing adequate artificial respiration is expired air ventilation.[3] It has been accepted by the international authorities in this field as the technic which should be taught to the laity.[4] Briefly, the operator extends the victim's head to obtain an adequate airway, and blows his own expired air through the mouth, nose or both. Now that instruction manikins are available[5] it is easy to teach, even to children. The method allows adequate oxygenation and incorporates control of the airway. Since the operator can observe the rise and fall of the thoracic cage, the adequacy of ventilation can be readily appraised.

The intimate contact, however, is repugnant to some individuals, and if the victim has an unrecognized communicable disease he may infect the rescuer. These are real disadvantages. Nevertheless, for the laity, and the physician, who does not have any resuscitation equipment immediately available, it is the method of choice. There have been some minor modifications of the technic, which included the use of mechanical aids,[6] such as the Safar S-airway. Unless the operator is familiar with use of these devices, their use may decrease rather than increase the efficiency of resuscitation.

Ventilation Equipment

Physicians can offer their patient more efficient ventilation, however, by the use of relatively simple and inexpensive equipment, which should be close at hand in the emergency situations they are likely to encounter. The most convenient of these is the Ambu bag and mask.[7] This apparatus consists of an anesthetic mask attached by a non-rebreathing valve to a specially constructed breathing bag. This bag is lined with sponge rubber and has a one way valve in its tail. When the bag is compressed its contents are forced through the mask. Release of pressure allows the bag to re-expand spontaneously, refilling itself with air drawn through the valve in its tail. Thus if the mask is firmly applied to the patient's face the patient can be ventilated with room air. The device is independent of a source of oxygen. Oxygen can be introduced through the tail of the bag and, with high flow rates, the room air can be enriched to about 35% oxygen. The apparatus is supplied in a bright yellow bag, containing several sizes of anesthetic masks, and has ample instructions printed upon it. This bag can be hung conspicuously in an emergency room, ward, office or stored in

the trunk of an automobile. The disadvantages of the apparatus are that it does not allow ventilation with pure oxygen, and because of the mechanism of the valve, the patient cannot spontaneously breathe oxygen from the bag.

Other methods require a source of oxygen. This should present few problems in a hospital, where a central oxygen supply or oxygen cylinders are available. Such methods do allow the physician the privilege of ventilating the patient with pure oxygen, undoubtedly the most effective atmosphere for the initial treatment of the respiratory emergency.

The simplest apparatus for artificial ventilation with pure oxygen is the anesthetic mask and rebreathing bag. A high flow of oxygen is introduced into a connector between the bag and mask, and the excess oxygen and expired air are eliminated through the partially open tail of the bag. The operator, with a little training, can determine by the feel of the bag whether airway obstruction is present or ventilation is adequate. This device is inexpensive and, when used correctly, highly efficient.

Mechanical ventilators have only limited value in treatment during the emergency phase of respiratory resuscitation. In certain specific instances where very high airway pressures are necessary to produce adequate ventilation, as in the crushed chest syndrome, they may be essential. Otherwise mechanical ventilators should be reserved for those occasions where prolonged artificial ventilation is necessary, and should be used in conjunction with an endotracheal tube or tracheostomy. Their routine use in the acute respiratory emergency is unsatisfactory. Preparing the ventilator for use wastes valuable time. The inexperienced operator may not be able to perform correctly or understand the necessary adjustments. He is easily misled by the noises emanating from the machine: these noises are not indicative of adequate ventilation. Too frequently, individuals place reliance on mechanical equipment to compensate for their own inadequacy. Unless the operator comprehends the principles and is familiar with the simple methods, he (and his patient) are unlikely to derive any benefit from complicated mechanical devices.

A single article can only discuss the principles, and merely indicate the technical practices of artificial respiration. Control of the airway and the application of intermittent positive pressure to the airway offer the most effective methods presently available. Demonstrations and practice in the operating room are available to all physicians. Technics of artificial respiration are so simple to teach and to learn, there is little reason not to expect every physician to be able to manage the acute respiratory emergency promptly and efficiently.

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The Case of the Fumbled Fungus



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JUST ABOUT EVERY CHILD in kindergarten learns to identify common objects; they learn that ALL matter is animal, vegetable or mineral. If a plant of *any* kind is a vegetable, then, forsooth, orchids and wheat grains are—in fact, have to be—vegetables! Well, now! The famous 18th century botanist, Karl von Linné (the originator of modern systematic principles defining genera and species) was just a vegetable grower! *And:* that magnificent herbarium that he started and that still is the LINNEAUSHOF, that every visitor to Holland ought to place on his "must" list—this shimmering garden of beautiful color, is a vegetable patch!

But, wait a minute! Is a *crystal* of polio virus, lying inertly in a test tube, just a bit of mineral? Or—is it a deadly, dormant, coiled bit of life, animal *or* vegetable? Poised to spring into doom-dealing devastation.*

Definitions color our thinking; we observe objects and see them in the context of *how* we have been taught to look at them. The fact of yesterday may be the error of today. Fungi had been classified as plants, largely because they are non-motile even if they show strong phylogenetic affinities with the protozoa. Back in 1866, Ernst Haeckel had proposed to resolve this ambiguity by placing microorganisms in a separate kingdom of their own, neither animal nor vegetable: the PROTISTA. Without being detained further by finer microbial classifications, let us simply remember that *medical mycology*, by definition, deals with fungous infections afflicting man.

All of this scientific speculation would be totally wasted on Joe Jax; after all, he is the subject of our tale: let us proceed to his story.

A Happy Huntsman

Joe was born on a plantation in South Carolina just before World War I. As a child, he recalls being one of a swarm of youngsters working on a peanut farm. While he had repeated bouts of "growing chills"—shaking attacks of malaria—he escaped most other childhood ailments and grew into a slender, quite handsome, soft-spoken and well thought of farm hand. He

* Frank L. Horsfall, Jr.: On the Unity of the Sciences, *Science* 133:1059-1060 (April 7, 1961).

married early and started rearing a family of his own. He tenant farmed on peanut and cotton plantations. He worked hard, attended church regularly, abstained from drinking or carousing, and never got into trouble of any sort. His only real relaxation was weekend hunting excursions with the pack of half dozen hounds he always had lolling around his shack. In 1938 he found profitable employment as a logger in the Virginia swamps. The pay was good and the off days' hunting was even better.

Along came World War II and Joe became a draftee filling a rear rank. He went through numerous battles unruffled and unscratched. He obeyed orders faithfully; lacking the imagination to envision the terrible, his stolidity passed for bravery and he earned some medals. Promotion never came his way; all his C.O.'s knew that here was the ideal follower: never a leader. He did learn to read and write; also, as a tourist in uniform, he did acquire some knowledge of horizons beyond the swamps of the Piedmont countryside. After his demobilization, he went to work in Suffolk, Va. at a hog slaughtering house. He still enjoyed hunting but a vague unease disturbed his former placidity.

In 1947 he came to New York and got a job as a post office custodian—janitor in plain parlance. Until 1953 he lived on Staten Island as he was reluctant to part with two of his favorite dogs. But that year, both animals succumbed to accidents: autos kill hounds as well as humans and Joe moved to Brooklyn to be nearer his job.

Coryza and Complications

Shortly after this, there began the curious chain of medical happenings that makes the present recital so instructive. In the winter of 1955, Joe had "a lot of colds"; these were subjected to the usual home remedies. Instead of getting better, he got worse and so had to enter a "name" voluntary hospital for treatment of respiratory troubles diagnosed as "pneumonia." After a course of penicillin and sulfa therapy, he felt better even if not completely well. The resident's summary note stated that, "patient has several eczema-like patches on his face, forearms and left leg." They had appeared for the first time the year before but there was no pain or itching associated with them and so Joe had paid these lesions scant heed. A dermatologist saw the skin eruptions and thought that psoriasis and eczema had to be considered although allergic possibilities were not ruled out. Some mild soothing salves were prescribed and used; whether because of them or not, some eventual benefit seemed to accrue.

Much more serious was the fact that x-rays "showed an area of non-resolution of the infiltration in the right lung mentioned previously." Joe was transferred to the largest municipal hospital of the borough and placed directly on the chest service. During his four month stay on that floor, our patient was kept on bed rest and given a most extensive laboratory work-up.

Numerous luminary attendings, professors at the medical school and other such specialists went over him; the eventual consensus was "continuation of the anti-T.B. therapy, even in the face of the total failure to demonstrate either the presence of tubercle bacilli or, at least, having a positive skin test for T.B."

A Phlegmatic Patient

Maybe it was the therapy—maybe it was just the bed rest and the vis medicatrix naturae. In any event, the skin cleared completely and the lung symptoms all but disappeared even if the x-rays failed to reflect the clinical improvement. Still taking INH and PAS, Joe Jax was discharged to the out patient department.

For the next couple of years, our central character pursued his placid routine in passable good health. Lacking an imagination Joe did his daily chores oblivious of what TB *could* do. Being a war veteran, he reported to the VA clinic, was—yet again—gone over thoroughly and given a rating of "30% service connected T.B." Thus was *that* diagnosis made official: after all, the Treasury could not admit ignorance of the disease for which it was disbursing cold cash!

Treatment, whether supervised by municipal, private or Federal physicians, just

did nothing to resolve that stubborn right lung infiltration. Finally, in 1957, Joe Jax was directed to report to an excellent VA Hospital "for evaluation of the perplexing persistence of the lesion in the right lung." Being inculcated in obedience, our hero appeared promptly and at the right place. The excellent staff of this very superior facility spent a month putting Joe through every test the attending and regional consultants could conjure. Finally, surgical excision of the offending tissues was undertaken. The patient went through the ordeal of a lobectomy with flying colors. The pathologist reported, "non-specific pulmonary abscess. . . ." Joe was told that he had neither cancer nor T.B. . . .

Through all these tribulations, Joe kept his unfailing good humor and pleasant smile even if his strength did not return as expected. The skin lesions did fade—almost; he managed to return to his job. His disability rating was raised to 75%; the monthly check from the Federal Treasury he accepted unfailingly. Neither really well nor really ill, he hobbled around when not laid up with the increasingly repeated bouts of "flu" and "colds."

Dermatological Dubiosity

In the spring of 1962, there was a recrudescence of the old skin lesions. Over his left eyebrow, an indolent, crusting sore grew and spread; there were skin changes on his legs, arms and neck. He went to the OPD of a municipal hospital in his neighborhood. The dermatologists suspected venereal disease and even yaws; scrapings were taken and a thorough search made for spirochetes, viruses and the other agents responsible for the gamic gamut.† The VDRL test for syphilis was negative; the blood complement test for lymphopathia venerea, ditto; Donovan bodies of granuloma inguinale were conspicuous by their absence; not a single Ducrey bacillus was ever seen.

Such tests as the Frei, Ito-Reenstierna and others of that ilk were all serene rebuffs to the baffled skin experts. Rather grudgingly, the OPD physicians continued their treatments with noncommittal local antibiotic ointments, antihistamines internally and other innocuous medicaments. Fortunately for Joe Jax, a spinal puncture was not done either at this time or on any previous occasion. The omission makes me wonder but it was a fact, how did everybody overlook this rather routine diagnostic maneuver?

Be that as it may, by the fall of 1962, Joe Jax was no better: in sober truth, the records bear out a gradual but inexorable downhill course. And then, in October of that year, a brand new set of symptoms appeared. Although barely 50 years old, urgency, frequency and dysuria called clamoring attention to the lower urinary tract. By early November sudden retention made Joe a hospital emergency. The genitourinary experts noted, "a large, indurated smooth prostate." The surgeon performed a transurethral resection; Joe's water works resumed functioning; the chills, fever and renal symptoms disappeared pari passu with the clearing of the urinary infection. Pathological sections of the prostatic tissue were reported, "no evidence of malignancy or T.B. . . . some focal giant cell granulomas. . . ." Joe convalesced splendidly; within 10 days of his latest operation, he was discharged to home care. It was almost a decade since his first skin lesions and the development of the stubborn pulmonary troubles.

Recrudescent Rupia

On 2/5/63, Joe re-entered still another municipal facility for the care of his reflared dermatological lesions. They had grown so flamboyantly that, for the first time, Joe Jax was beginning to be concerned about his future. The very next day, I had my first sight of this man. My consultation note is before me even as I write. Of course, the really detailed anamnesis summarized so briefly above was not available to me. I would be less than candid were I not to confess that my writing has been strongly influenced by the use of the retroscope: that most useful of phantom instruments even if mysteriously omitted by all

† Veneniferous Venery, *JISMA*, pp. 51-55, January, 1963.

known dictionaries! It is merely another synonym for *hindsight*, the ability to gaze backwards after being armed with a knowledge not originally available.

In all fairness, I must quote my impression as being, "Granuloma of some sort. . . . The D.D. is 1) tuberculoid leprosy; 2) syphilis; 3) fungus (blasto-actino-coccidioido—etc.); 4) T.B.; 5) yaws; 6) sarcoidosis; etc." Just looking at him, my attention was drawn to the eroding lesion on his right nares beginning to create a defect. Also, the other florid, crusting sores on his face, hands and arms reminded me almost irresistibly of leprosy, a rather rare disease in this part of the world. I am no expert in this field, my entire personal experience being limited to some dozen cases seen over the lengthening years. I did search for areas of anesthesia; I looked for the leprous neuritis and I did note that there *were* some areas of what could be taken as being early sensory dissociation. The syphilis I considered next; at the time, I did not know of the exhaustive search that had already been made for this malady, so well called by Osler, "The Great Mimic." I am *very* proud of item three on the D.D.; I am even more happy with my only recommendation, "A biopsy must be taken of a lesion before any therapy is to be instituted." The older I get, the more irritated do I become at the sight of a pageful of orders for therapeutic modalities undertaken in lieu of a diagnosis.

The next morning, a generous snip of skin and ulcer were excised from a lesion in the bearded area of the chin. At the same time, a second attending man, whose diagnostic acumen has my highest respect, was persuaded by me to view the patient. His opinion was that, "These rupial lesions fit in with several possibilities: 1) chronic discoid lupus erythematosus; 2) mycosis fungoides and other mycotic conditions; 3) sarcoidosis. Against a diagnosis of Hansen's disease is the florid nature of the lesions and their acute evolution."

We both noted the marginal defect of the right nares; early clubbing of the fingers was observed. Breath sounds were coarse throughout the chest; the heart seemed normal; so was the prostate. Initial sputum cultures turned up only a hemolytic strep.; the E.K.G. was normal. The chest film was reported as, "consistent with the diagnosis of active caseous pulmonary tuberculosis" (Figure 1). The admission white blood count was 19,900. Hemoglobin was 10 gm., serum K^+ was 5.0 mEq/liter. The overall impression of a chronically but not acutely ill patient was again recorded. He was alert, coherent and in no noticeable distress.

Mycologic Mystery Mastered

That afternoon, the pathologist called, "What is the problem?" The situation was then discussed in some depth; my expert friend grew thoughtful and decided on "running through a lot of special stains." The very next day, I got a somewhat excited personal phone call, "Arnold, guess what we found: *BLASTOMYCOSIS DERMATITIDIS! !* The sections are loaded with them; I am going back and will review personally all the old sections I can snare; who would have thought of this?"

The prostate sections—when stained properly—yielded a profusion of the organisms. The VA facility and the name hospitals had retained slides on the case and

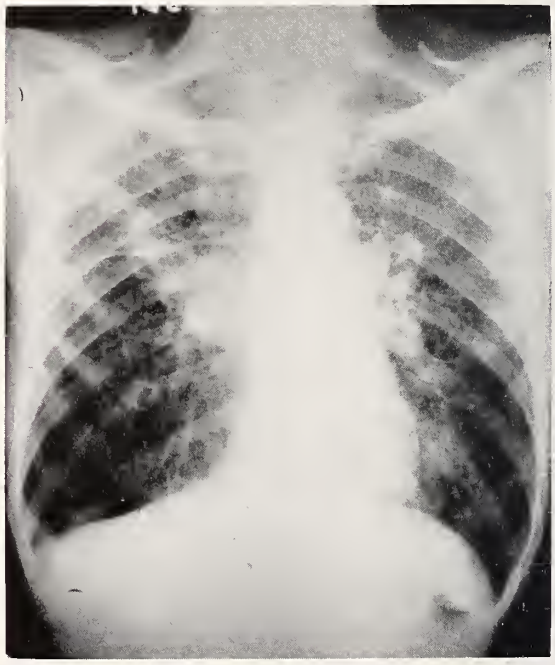


FIGURE 1

CHEST X-RAY consistent with diagnosis of active caseous pulmonary tuberculosis.

were gracious enough to make them available to us. To no one's surprise, the story was repeated and amplified.*

Perusal of the footnote makes clearer the emphasis that Joe Jax had come from the Carolinas and that he had been, for many years, in very intimate contact with hunting dogs. Also, the comment on the fact that our patient had escaped having had a spinal puncture; Dr. Littman is quite emphatic on the deadly danger of CNS extension of the fungal growth precisely by this route.

There is not much more to add; the essence of the tale has been presented. Joe Jax was put on therapy with amphotericin B; he has tolerated the medication very well, indeed! The lungs are clearing and the skin lesions have vanished. We did find osteolytic lesions (when we looked). The x-ray of the hand shows one of them. (Figure 2) The bone is beginning to regenerate; the patient is feeling once again like his placid self. The fact of his dark skin is in his favor and we have every reason to think that Joe will have a complete cure.

As we used our magical retroscope, a whole host of question marks have appeared. As we observed originally, we look at objects and draw deductions using the frames of reference we have been taught; all too frequently, we look without seeing. It is all too easy to indulge here in some smug sermonizing. Much better is the approach of my erudite British resident who remarked, "Dr. Lieberman, I notice that you have a weakness for alliterations. Why don't you write Joe up as 'The Case of the Futile Festering Funk over the Furious Furor anent the Frustrating Fudge with the Fumbled Fungus?"

"Well, doctor! Your flippant flapping of the fizzing f's does admirable credit to your fertile and fervent phantasies; the Case of the Fumbled Fungus is title enough and for this I thank you."

Statistically speaking, the metropolitan area of New York turns up all of *three* cases of blastomycosis annually. Imagine my astonishment this very week when I beheld a ward admission with skin lesions startlingly reminiscent of Joe Jax's freshly

* For the sake of coherent continuity, I have reduced my annotations on the latest and most authoritative data pertinent to this fungus, to this extensive footnote. My source material comes from personal communications from Dr. M. L. Littman, who wrote the article on "Therapy of Cryptococcosis" in the monograph on *Fungi and Fungus Diseases*, edited by Gilbert Dalldorf, M.D. (Chas. C Thomas, publisher, 1963). Also, there is a detailed report from the Communicable Disease Center Cooperative Mycoses Study: Dr. Michael L. Furcolow in *JAMA* Vol. 183, #10, pp. 823-829, presents the results of therapy with amphotericin B.

Essentially:

New York City area cases of infection with blastomyces dermatitidis come chiefly from the Carolinian area. For some yet to be explained reason, dogs seem to be incriminated in its dissemination. The dark-skinned races seem to be much more susceptible. After systemic entrance, usually via the lungs, eventual mortality has been well over 90%. After finding the fungus, a bone survey should be made and punched-out osteolytic lesions sought.

In therapy, one must avoid vitamins, steroids, antibiotics and iodides. Spinal puncture can breach the CNS barrier and cause a fatal dissemination in the nervous tissues. Stilbamidine, hydroxystilbamidine isethionate, has been used with some success; the present drug of choice is amphotericin B; it contains mycosamine plus sodium desoxycholate; Squibb packages it under the trade name of Fungizone; it comes in a vial holding 60 mgs. of the powder.

Because of the great toxicity, the instructions for giving the medication are very detailed and have to be followed to the letter. The intended dose has to be given over a period of six hours; the powder is dissolved in a 500 cc. flask of 5% G/W and given intravenously. It is well to add 15 mgs. of heparin to the fluid; a nurse has to be in constant attendance and a monitoring E.K.G. has to be available: hypokalemia can widen the QT to the point of an actual cardiac standstill. The dosage is started at 0.3 mg. per kilo of patient body weight. The injections are given every other day. The quantity is increased by increments until as much as 1.5 mg. per kilo body weight might be injected. Febrile reactions are to be expected; weekly BUN readings are done; if anemia supervenes, a transfusion is in order. X-rays monitor chest and bone healing. The lungs heal first; bone regeneration is very slow. A total of two *grams* of amphotericin B constitutes a course; these can be repeated as indicated. This treatment has reduced mortality to about 20%. Amphotericin B is effective against most of the hitherto lethal, disseminated mycotic infections.

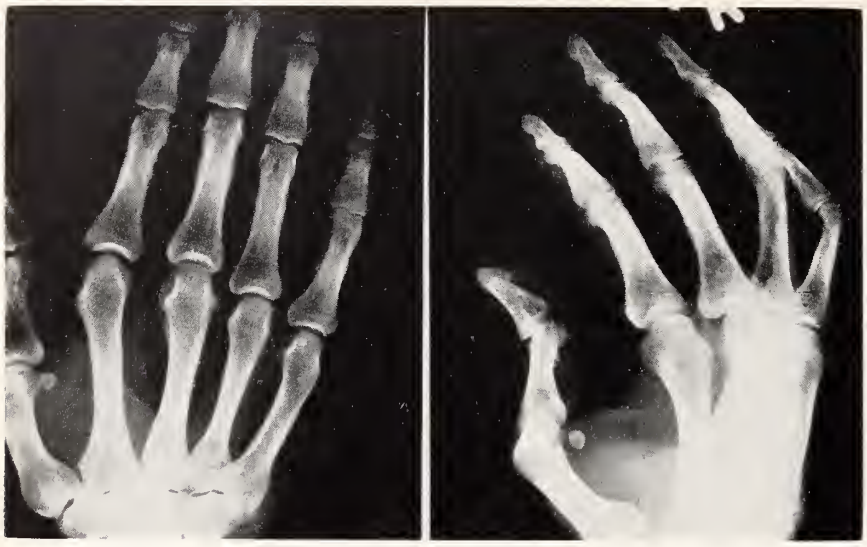


FIGURE 2
X-RAY OF THE right hand demonstrating osteolytic lesions.

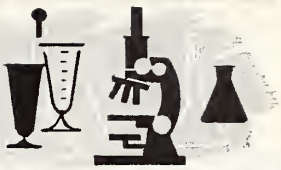
healed ulcers. . . . His lungs are reported as, "advanced fibrocaseous tbc.!" He does not look that sick; could it be? Does lightning strike twice in the same place and so soon? Quién sabe? Now THERE would be a real story! But, it will have to await another day. . . . ◄

1270 Fifth Avenue
New York, N. Y.

Too Much Government — Too Little Pride?

I am disturbed with the growing paternalism in government. More and more people are looking to the Federal government to do for them things they should be doing for themselves and could better do for themselves. And Federal officials have not been at all reluctant to assume greater powers on behalf of the people. Too many politicians are seeking popularity by out-promising one another in Machiavellian proposals to increase the material security of the constituents. Too few will listen to the sage and age-old advice that beckons from all responsible quarters: that one rarely gets something for nothing in this world, except through appropriation of what is not rightly his. Or if they listen, they do not believe. Or if they listen and believe, they do not or will not communicate this message to the people. This is another value from the past I hope we can cling to: pride in oneself.—Austin Smith, M.D., President, Pharmaceutical Manufacturers Association, to Advertising Club of St. Louis, Mo., Feb. 6, 1963.

Path-finder
PUBLISHED UNDER THE AUSPICES OF THE INDIANA ASSOCIATION OF PATHOLOGISTS



Hu Factor May Kill You!

THE NUMBER OF individual blood factors which have been discovered in recent years is truly astonishing. And the number of units of whole blood used yearly for transfusion is no less astonishing. According to best estimates, approximately 5,000,000 units were used in 1962. The number of clinical and medico-legal complications associated with blood transfusions is noteworthy.

The Joint Blood Council last year prepared praiseworthy basic criteria for blood transfusions and recommended a transfusion review program, particularly in regard to the use of single units.

The American Association of Blood Banks successfully embarked on an accreditation program for blood banks based on previously established "STANDARDS FOR BLOOD TRANSFUSION SERVICE."

In spite of great progress in the quality of blood bank services, risks in blood transfusions continue and people do die from mismatched blood, improperly screened blood or contaminated blood.

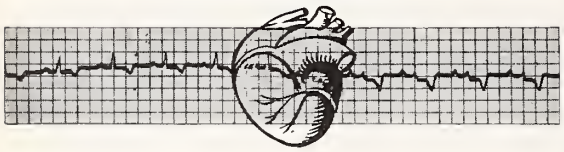
There is no safety in mishandled blood! Over 90% of mistakes occur as the result of clerical human errors, the Hu Factor! WRONG label, WRONG bottle, WRONG pilot tube, WRONG patient. Unnecessary blood transfusions may spell death.

Beware and Be Aware

1. Give blood on definite indications only. The restoration of blood volume is the main indication.
2. Think twice before giving a single pint of blood; if the patient appears to need only one pint of blood, he probably does not need it at all!
3. Do not give blood as a "tonic" or protein or iron replacement. It is an expensive and dangerous "meal"!
4. Request blood for elective uses a reasonable time in advance so as to decrease any human error due to rushing.
5. Personally check and double check the labels and patient's identity before using the needle.
6. Observe the existing blood bank regulations—they are established for your protection and your patient's protection.
7. If possible, avoid giving blood *during* anesthesia—dangerous reactions may be masked.
8. Keep informed of the continuous progress in blood transfusion therapy.

Indiana Association of Pathologists

Electrocardiogram
of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Krannert Heart Research Institute, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

Non-Paroxysmal A-V Nodal Tachycardia

CHARLES FISCH, M.D.
Indianapolis

PAROXYSMAL atrio-ventricular (A-V) nodal tachycardia is a fairly common ectopic arrhythmia. The rhthym is perfectly regular and the rate is usually above 200 per minute and is frequently seen in otherwise normal individuals. Non-paroxysmal nodal tachycardia has a regular rhythm with a rate varying from about 120 to 160, or sometimes higher, and is nearly always due to either severe digitalis intoxication or myocarditis.

The patient, whose EKG is reproduced in the accompanying figure, was a 21-year-old woman who following pneumonectomy dedeveloped sinus tachycardia (strip 1). She was given 2.6 mg of digoxin intramuscularly. Strips 2 and 3 are continuous and show P waves with a changing relationship to their respective QRS complexes. The ventricular rate is 166 per minute and is slightly faster than atrial rate. The lack of a fixed P-R interval indicates an atrio-ventricular dissociation with the focus controlling the ventricle located in the A-V node.

Strips 3, 4 and 5 are continuous and represent another run of non-paroxysmal nodal tachycardia. Because the difference between the atrial and nodal rate is so slight it is difficult to be absolutely certain, but the fixed P-R in the last portion of the bottom strip suggests that the P waves are conducted and normal sino-atrial rhythm is in control.

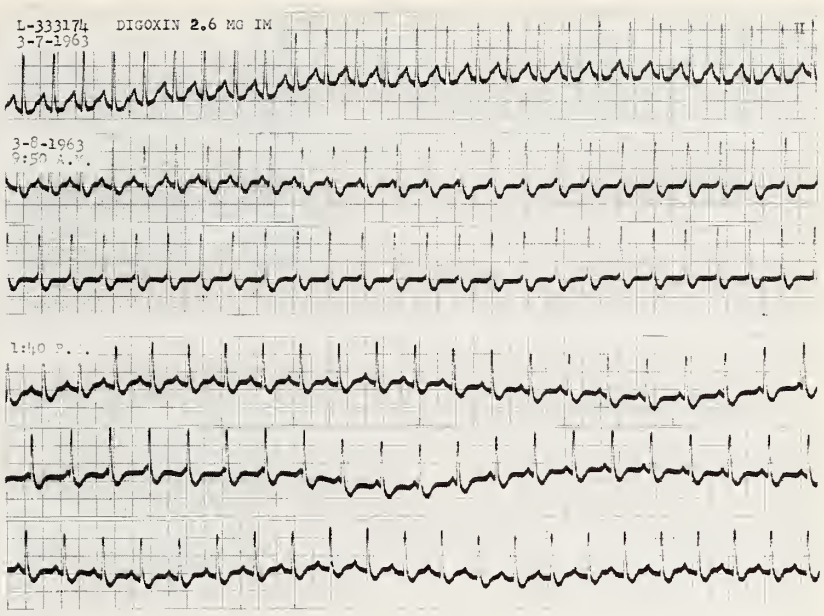


FIGURE 1

UPPER STRIP shaws sinus tachycardia. Twa runs af A-V nodal tachycardia are represented by cantinuaus strips 2 and 3 and again in 3, 4 and 5.

X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

Temporal Subdural Hematoma

*ERICH K. LANG, M.D.**
THEODORE LUROS, M.D.†
Indianapolis

A 22-YEAR-OLD factory worker was struck by a crane on the left side of his head. Skull roentgenograms were obtained at the plant and failed to reveal any evidence of a fracture. There was no evidence of leakage of cerebrospinal fluid or blood from the left ear. Apart from a bruise in the soft tissues, no abnormalities were found on physical examination.

During the next 24 hours, the patient had constant headaches accompanied by projectile vomiting. He showed progressive changes, including increased weakness on his right side and greater drowsiness. Arteriograms were performed and revealed an elevation of the right middle cerebral group, suggesting a mass below the right temporal lobe. The absence of capillary stain and failure of peripheral vessels to extend to the inner cortical margin of the skull suggested a subdural hematoma. Burr holes were placed in a low temporoparietal position, and the hematoma was evacuated.

Subdural hematomas in the temporal area, and particularly below the temporal lobe, tend to be evasive. Often a higher placed burr hole will fail to reveal the presence of this hematoma. As in this case, there may only be very minimal shift of the anterior cerebral artery, since the overall displacement by this space-occupying lesion need not necessarily cause a signifi-



FIGURE 1

NOTE THE MARKED elevation of the M-1—M-2 junction portion of the left midcerebral group. The normal 90° angle of these two segments has been straightened out. There is no significant shift of the left anterior cerebral artery to the right side.

* Acting Director of Radiology, Methodist Hospital.

† From the Neurosurgical Division, Methodist Hospital.

cant deviation of the anterior cerebral group.

The only reliable finding is the marked elevation of the M-1—M-2 portion of the middle cerebral group. The straightening of the normal 90° angle of the M-1—M-2 junction portion of the middle cerebral group may often be the only early sign of a small temporal hematoma of either epi- or subdural variety. Pneumoencephalograms usually show an elevation of the temporal horn on this side and at times, may also show compression of the temporal horn from below. ◄

Politics and Medicine

In the past it has been a tradition that the American physician confine his efforts to the care of the sick, leaving politics to the politician. Recent events on the political front have made it quite clear that a continuation of this policy will lead to an undermining of the very foundations on which the profession has been able to render the highest quantity and quality medical care known to our country in recorded history. The physician is sworn, at all times, to render the best possible care to his patient, keeping only the best interests of his patient in mind in so doing, and to refrain from any action that is in conflict with this precept. With this thought in mind, how can the American physician be expected to stand idly by while a third party penetrates the personal relationship between the physician and his patient?

We have seen this ocur in other countries not only to the extent that the patient has no choice of physician but the physician is limited in his choice of medications. We have observed the rapid decline in quality of medical care in those countries, the relocation of the great world centers of medical education from Europe to America, and the desperate flight of our foreign colleagues to escape this paralyzing atmosphere. In spite of all this, there are in this country politicians in office and aspiring to office who would have our patients believe that this is what they need in American medicine. Their approach is empirical—small doses are their technic—but we as physicians know that the cumulative effect of small doses can be fatal.

By maintaining silence on such a vital subject, we would be negligent both as physicians and citizens. We must express our beliefs in places where they will be effective or we will go down with our patients into a sea of paternalism and bureaucracy. Call it politics if you will, but we're in it whether we like it or not. Let us not forget that sometimes the most effective therapy is the least palatable.—J. Spencer Dryden, M.D., in *Medical Annals of the District of Columbia.*

The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

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"And Called It Macaroni"

A NEWS ITEM from the Chamber of Commerce of the United States reports that a trade association resolution has been found to be in effect a price-fixing arrangement by a hearing examiner for the Federal Trade Commission, illegal per se under Section 5 of the Federal Trade Act. The resolution, adopted by members of the National Macaroni Manufacturers Association, called upon durum millers to provide a blend of 50% durum and 50% other types of wheat for the making of macaroni.

It also called upon the manufacturers of macaroni to use the 50-50 blend in making their products. An official publication of the association reported that it had been decided that the blend would be produced and used. The secretary of the association reported to a federal agency that the resolution constituted a "general agreement."

Looking at these facts, the hearing examiner concluded that the members of the association had agreed upon a "common course of action to fix and determine the quality of macaroni products." This, in turn, affected the demand for durum, and demand has an effect on the price of a commodity. Any agreement that affects demand, the examiner said, affects price, and is illegal per se under the antitrust laws.

Do you suppose that, if this country ever has socialized medicine, any effort of a medical association to improve medical knowledge and improve medical practice would be interpreted by the "hearing examiner" as an attempt to fix prices by making the product more valuable, and that the whole thing would be found illegal under the antitrust laws?

Guest Editorials

Silo Fillers Disease

ALTHOUGH SILO FILLERS disease may not be a commonly encountered health hazard associated with farming, the seriousness of the hazard mandates constant vigilance by farmer and physician. For centuries, it has been known that a mys-

terious malady, frequently fatal, occasionally occurred when farmers entered silos. However, it was only within the past decade that the etiological agent has been identified, clinical pattern understood and the mysterious malady identified as silo fillers disease.

It had been assumed that silage gas poisoning in man was due to carbon dioxide inhalation with simple asphyxia as the abnormal physiological respiratory process. Scaletti, in 1960, reports the production of oxides of nitrogen in farm silos and implicates deaths or severe pulmonary changes to the exposure of these individuals to oxides of nitrogen.

Oxides of nitrogen are toxic in relatively small amounts and characteristically produce no immediate ill effects. After a latent period, lasting from one to 24 hours, the exposed individual develops a severe chemical irritation of the alveoli resulting in either a minor or severe form of chemical pneumonitis with the production of pulmonary edema. The severity of the pulmonary edema will be in direct proportion to the length and concentration of exposure.

Grayson indicates that silage plants, particularly corn, contain nitrates in the plant stock. It appears that the concentration of nitrates in plants will vary with moisture in the soil. During drought, the concentration will increase whereas during periods of normal moisture content of the soil, the concentration will decrease. Evolution of the oxides of nitrogen begins within a few hours after silo filling and reaches its maximum production within one or two days later. Production of this gas continues at a decreasing rate for the next eight to 10 days.

Prudence would dictate that any individual with a history of entering a silo within the first 10 days of filling the silo, should be suspected of developing a pulmonary edema and should be treated accordingly.

Prevention of silo fillers disease is readily accomplished, in theory at least, if this reasonable plan is suggested to the farmer:

1. Allow no one to enter the silo for the first 10 days after filling. Following this period, use the blower fan before entering.
2. Provide good ventilation about the base of the silo to permit the escape of silo gases.

Attention is drawn to silo fillers disease not only because it may be fatal, but also because there may be a lack of awareness concerning its prevalence.

Louis W. Spolyar, M.D.
Indianapolis

Highway Accidents: A Challenge to Preventive Medicine*

SINCE THE TIME of Jenner, Pasteur, and Reed, physicians have been interested in preventive medicine. Smallpox, yellow fever, and many other diseases that once scourged the earth, leaving tragedy and waste in their paths, have been conquered. The plagues of old Europe are known only in history books; they are no longer feared by mankind.

Today we are spending huge sums of money and energy to learn the causes of cancer and heart disease, and to cope with the problems of mental illness. We hope soon to have answers as the reward of the effort being exerted.

But what is the big killer today? Cancer? Heart disease? War? No; it is the automobile. With more than 38,000 deaths and some 4,000,000 injuries incurred on our highways last year, we are facing a plague that apparently has no cure. This carnage mounts yearly, with little public concern. Some safety-minded groups, small in number, are searching for the answer. In recent years automobile manufacturers have made an effort to build safety into their cars, but their enthusiasm has been dampened by a lackadaisical and indifferent public.

The driver of today is interested in new design, in horsepower, and in comfort. The attitude of the average driver is that all the warnings and advice on safe driving are not intended for him; he is a good driver. He

* Read before the Sixth Annual Colonel Stapp Conference, Holloman Air Force Base, New Mexico, November 7, 1962.

won't be a statistic! Highway engineers have tried to help this "average" driver. In spite of super highways, dual lanes, improved signs, fewer turns, and elimination of unnecessary lights and crossroads, however, we still have accidents.

The police have redoubled their efforts to enforce traffic laws, but they are handicapped by laxness in the lower courts and by a lack of cooperation on the part of the public. This is a problem of many facets, with no simple, single answer.

A few medical men became interested in improving the survival rate of the racing-car driver and were successful in making roll bars, helmets, fireproof clothing, and safety belts required equipment. Here the American Association for Automotive Medicine was born. From improving the lot of the racing-car driver, it was a natural step for the physician to become interested in his own survival and that of his family. Medical men have finally seen the rising automotive death rate as a challenge—one that calls for the enthusiasm of an Arrowsmith to find the cause and cure.

Emergency room service and on-the-scene investigations have taught doctors the cause of many injuries. Through their persistence, and with the help of engineers, the interior design of cars has gradually been modified to present fewer dangers. Drives by medical groups have also changed the thinking of many drivers with regard to seat belts. On seeing guilty drivers set free to roam our highways once again, physicians have begun to demand of their state legislators better traffic safety laws and a study of the unfit driver.

From the work of Alfred Moseley at Harvard, and men like McGee, Huelke and Gikas at the University of Michigan, we will soon know why people have accidents. Physicians, if they are to help the driving public, must look at our highway death and injury toll as a serious disease and work to find the answers. Then they will be in a position to practice preventive medicine.—Frank E. Barnes, M.D., President of the American Association for Automotive Medicine, *N. Car. Med. J.*, March 1963.

Letter to a Statesman

(Anonymous)

To the Editor
The Kentucky State Medical Association
Journal
3532 Janet Avenue
Louisville 5, Kentucky

Dear Sir:

This preliminary draft of a letter was found discarded in a local campaign headquarters after the 1962 fall senatorial election. As it is undated, with the addressee and signature omitted, we have no clue as to the identity of our bucolic Ben Franklin.

The course of the campaign suggests that either the letter was not transmitted or that it was ignored. My guess is that our unknown friend realized that no polishing of phraseology could make these homilies acceptable to his patron.

Sincerely,
George F. Brockman, M.D.

Excellency,

It will not have escaped your observation that our physicians, in large measure, have ventured into elective politics; and that they have even attained a measure of success. This is a new consideration of Gov't, especially as doctors, from the nature of their practices, tend to be independent in action, little given to joint actions, even with each other. The seven doctors who signed the Declaration of Independence had at least as many colleagues who removed to Canada, rather than live in our new Republick. Because of the novelty of this venture by the Drs, I give you my reflections upon it.

It seems our tradition from England that the doctor should partake of the affairs of government as a citizen at the polling places; but I find no record that there was ever any thought of their banding together to influence the General affairs of State. As the doctor's studies and observations showed where Gov't might act to lessen the ravages of Disease, the leaders of the State gave ear to the medical recommendations, and applied them for the general welfare.

I might remind you of Quarantine regulations, the improvement of the publick water supplies for the abatement of Typhoid and other Fevers, laws for vaccination against Smallpox; and even on to the present time, with the new law for the protective inoculation of all school children and the Sabin Sundays to Vaccinate Against the Infantile Paralysis. I need not dwell on the benefits to the publick welfare which have followed from these wise measures.

Three decades ago, I have been reminded, this fruitful relationship was set aside by the Chief of the State, who you will readily recall as of the same political persuasion as your Excellency. He excluded the physicians from his Councils, giving ear to a group of advisers who were seeking to introduce into our Republick the old European thought that the State should manage the affairs of every citizen (for his own benefit, as they hold that the planners of the State have greater wisdom in planning for his Happiness than has any citizen in planning for him Self). His Excellency proposed that the doctors should be employed by the State, that the State might give medical care to all.

The great body of the doctors would have nought of this. The Congress, hearing from the people as well as the doctors, did not adopt this plan. This angered his Excellency, who flayed the doctors, classifying them as Bourbons among the Princes of Privilege. The leaders of the Democratic party have adhered to this platform since, barring the doctors from their councils.

I have discuss't this with many of the doctors. Most of them, I find, were raised on the principals of Thos. Jefferson. They feel harrassed, that our Party has cast them forth, in advocating Philosophies alien to those of Jefferson. Being studious by nature and training, and seeking to defend their belief and practices, many of the doctors are progressing rapidly in a study of the methods (including those of your Excellency) for influencing the Electorate. However, to a man, they still express an abhorrance of politics (save only in their own Societies).

I venture to address these lines to you with the hope that it may seem that the care of the sick is a matter for the physicians; that to again admit the doctors to the Councils of Gov't would free your Excellency for the larger problems of State with which we are sorely beset.

Admiration of your Excellency makes me fear for your profile in history when I hear the thin veil of veniality in our plea, almost as: "Take thou, therefore, no thought for thy father or thy mother; the State will take heed for them." Also, I confess that, should I be struck by infirmity, I would rather my physician give full attention to me, than that he needs must keep an eye peeled to observe what next his Gov't might have in mind to do to him.

Your obedient servant,

From the *Journal of the Kentucky State Medical Assn.*, April, 1963.

Editorial Notes . . .

The United States Public Health Service has acquired 1,930 portable, temporary and storable hospitals for use in emergencies and especially for civil defense use. These hospitals together with medical supplies are stored in strategic locations all over the United States. Jeffersonville, Indiana is the site of one of the Public Health medical warehouses. Each of the "hospitals" consists of equipment necessary for the establishment of a 200-bed temporary hospital in a school, church or community center.

Identification of a prescription medicine by entering its name on the label would be a great advantage in the treatment of children poisoned by accidental ingestion of such medicine. Dr. James Wilson of Ann Arbor pointed this out in a letter to the *JAMA*. He also said that prevention of self-

medication was the usual reason given for not identifying the medicine to the patient, but that the proper control of refills was the means of controlling this hazard.

The public has come to place more and more reliance on hospital emergency departments. Many patients present themselves at hospitals for emergency and semi-emergency care during hours when doctors' offices are customarily closed. These facts have prompted Dr. Robert Kennedy, director of the field program of the Committee on Trauma of the American College of Surgeons, to call attention to the importance of maintaining a high standard of care in out-patient and emergency departments. He also advises that small hospitals without regular emergency departments should have some staff rules and staff planning to cover the emergency created by the arrival at the hospital of unannounced accident patients.

Procter and Gamble recently announced grants to six medical schools in the U. S., given for the purpose of enabling the schools to continue producing medical school faculty prospects. The schools—Columbia, Harvard, Johns Hopkins, Pennsylvania, Chicago and Washington University—were chosen because of the number and quality of men they have contributed in the past to teaching staffs of other medical schools. The new program adds up to $90,000 annually, and brings Procter and Gamble's annual support of colleges and universities to more than $1,300,000. The money is given in each case without proviso as to how it shall be spent.

Penicillin allergy can be so vicious that even a skin test may be fatal. A new and safe test for sensitivity was described in the April 20th *JAMA*. A drop of the patient's blood is mixed with penicillin and observed under a microscope. If a certain percentage of the basophils disintegrate the patient is considered allergic. The test is useful, not only in excluding patients who are allergic, but also in making it possible to exhibit penicillin to patients who mistakenly consider themselves sensitive to the drug.

Health Information Foundation reports that two of the most potent factors in the rise of hospital costs is the relentless increase in the number of hospital employees and the inevitable increase in their compensation. In 1946, short-term general hospitals had 148 employees per 100 patients, in 1961 the ratio was 235 per 100. In 1946 the average hospital employee was paid 29% less than the average worker of the nation. By 1961, the gap had changed to nine percent. The nine percent differential indicates a still greater discrepancy in payment of hospital workers since hospitals employ proportionately more professional and skilled personnel than the rest of the economy.

Thirty-five children suffocated in abandoned refrigerators in the United States in 1962. This was the worst year to date. Prevention of this tragedy would be a good public relations and public education project for medical societies. Abandoned refrigerators can be rendered harmless by removing the door.

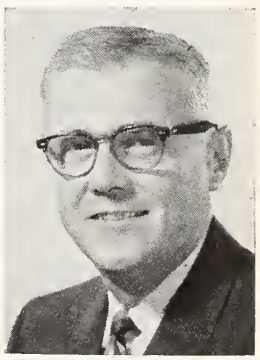
How can sample drugs be provided physicians who want them and can utilize samples and how to avoid sampling physicians who cannot use them? How to avoid scattering samples about, with some danger to patients who acquire them indiscriminately, and with danger of illicit resale? The Ames Company introduced "Scriptstarter" to accomplish the above tasks and have now adopted the procedure permanently. Instead of leaving samples, their detailmen leave a three part form with the doctor. One part is a preprinted prescription blank for the medication being detailed. The physician gives the form to his patient and the patient fills it at the pharmacy. The second part of the form instructs the pharmacist to fill the prescription without charge to the patient. The third part, when mailed to Ames, causes a reimbursement to the druggist. Result: unauthorized repackagers do not acquire samples; the patient maintains a normal relationship with his druggist; the pharmacist makes a profit on the transaction and the physician obtains the benefit of a new product prescription. ◄

President's Page

AMA ATLANTIC CITY MEETING

You will see elsewhere in this issue detailed reports of the actions of the House of Delegates of the AMA at the 1963 session at Atlantic City. I thought that you might be interested in a short report of the reaction of a state officer to the business side of the convention.

As an interested but non-voting observer, the first thing that struck me was the high caliber of the delegates that I met. These men as a group are truly dedicated and work unselfishly for the good of the entire medical profession. Many of the delegates, as in our state, receive travel and partial living expenses at the meeting but this does not begin to adequately recompense them for services rendered. In a conversation with one delegate during a trip from the airport to the meeting site, I found that he had attended 18 annual meetings as a delegate and that he had not been able to attend one scientific session during that period of time.



I was particularly pleased with the conduct of the delegates and alternate delegates from our state. All attended except Walter Portteus, who was gravely ill. Jack Jones capably served as spokesman and floorleader of our delegation. Daily caucuses were held at which time assignments were made for each person to attend reference committee meetings. Reports were made concerning the meetings attended.

As you know, a spirited political campaign was one of the major issues of the convention. As a carryover from the interim session, a change in the constitution was approved and became effective for three additional new members on the Board of Trustees. It was apparent that the greatest number of states and delegates were in favor of enlarging the board, and there were a large number of nominees for the prospective vacancies. We felt that we had a fine, able, experienced candidate in Lester Bibler and our delegates and alternate delegates went all out to obtain support from the rest of the house, which resulted in victory over a fine opponent. It is interesting to note that two other midwestern men were named to the new posts on the board, and all three men are actively engaged in private practice furnishing primary medical care. Complaints have been made in the past that the board has not been responsive to the rank and file member. It is hoped that this will become an unfamiliar complaint now.

We were fortunate in the outcome of another political race. For two years we have been trying to get a practicing physician on the Council of Medical Education, where much controversy is generated each year. Our candidate has been Francis L. Land, an able and conscientious worker in the field of medical education for many years and who has served on several sub-committees of the Council. In spite of some maneuvering, apparently generating from some of the stand-pat members of the Board of Trustees, we finally achieved our goal and Dr. Land was elected. It is hoped that he will bring a good measure of common sense and practicality to this very important council.

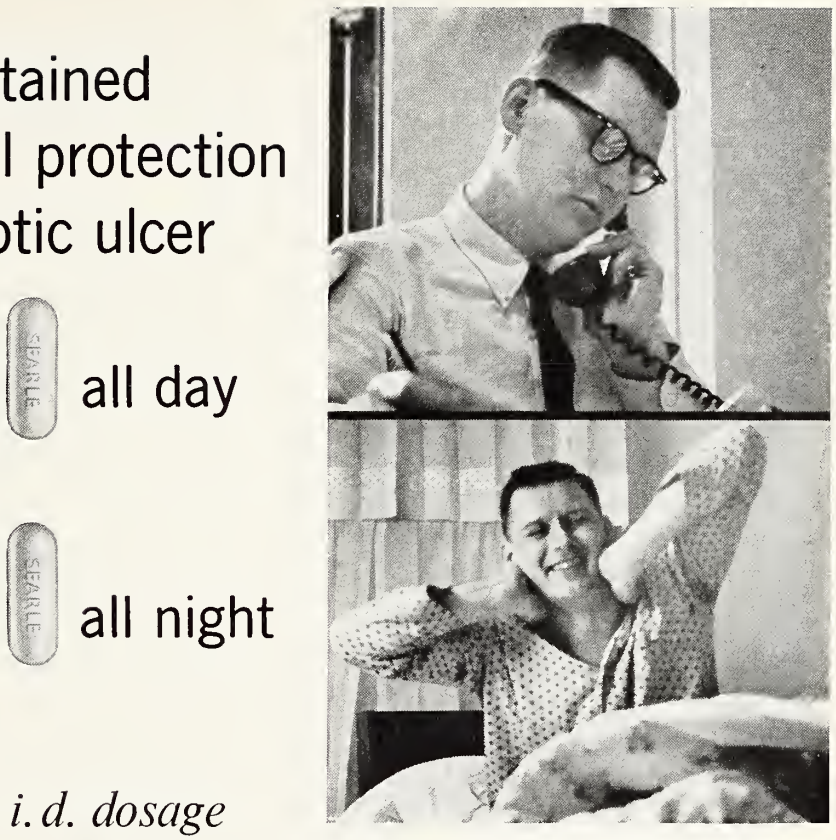
One of the disappointments of the meeting was that many important issues were settled and announced to the press before there was an opportunity for the house to act on these matters. Such an instance was the announcement that AMA-ERF was going to set up a basic medical research program in the AMA headquarters building. Now it is true

that AMA-ERF is a separate organization from AMA but the board of directors of AMA-ERF are also largely members of the Board of Trustees of the AMA. It is also true that the administrative expense of AMA-ERF is paid by the AMA. Considerable sums of money are going to be needed for this program in the future and while the proponents of this program feel that funds will become available through voluntary contributions, there is great concern that there might be temptation to use federal funds in the future. Much dissatisfaction could have been avoided if this could have been fully discussed and passed on by the House of Delegates, which is the true governing body of the AMA. This is a project which has been in the planning stage for two years and one which has never been discussed before the house or a committee of the house.

In closing, I would like to pay particular tribute to those members of our state association, not active officers, and in no official capacity, who attended the meeting at their own expense and put in full time assisting the officers and delegates in promoting our program. One of these was our immediate past president, Harry Stimson. Although not in good health, he volunteered to serve in whatever capacity he could and was of the greatest help and assistance to me. With the deepest regrets we learned of his untimely death only a few days after the conclusion of the meeting.

Maurice E. Slocke

Sustained high-level protection in peptic ulcer



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all night

with b.i.d. dosage

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Asher[1] has summarized the advantages of prolonged-action dosage forms: "First, they should be of great value in the suppression of night acid secretion in the ulcer patient. Also, in the ulcer patient, with high acid secretion during the day these drugs should be of help when used with regular doses of shorter-acting anticholinergic agents. A third application is in the chronic treatment of certain patients whose tendency to recurrent ulcer has been established."

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Pro-Banthīne P.A.
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Contraindications:
Glaucoma; severe cardiac disease.

Possible Side Actions:
Xerostomia, mydriasis and, occasionally, hesitancy in urination. Theoretically, a curare-like action may occur.

1. Asher, L. M.: The Choice of Anticholinergic Drugs in the Treatment of Functional Digestive Diseases, Amer. J. Dig. Dis. 4:260-275 (April) 1959.

The Woman's Auxiliary

REPORTS TO ISMA

SERVE and COMMUNICATE is the theme chosen by our president of the woman's auxiliary to the American Medical Association.

It is through auxiliary programs that we prepare ourselves to serve and communicate with knowledge and conviction.



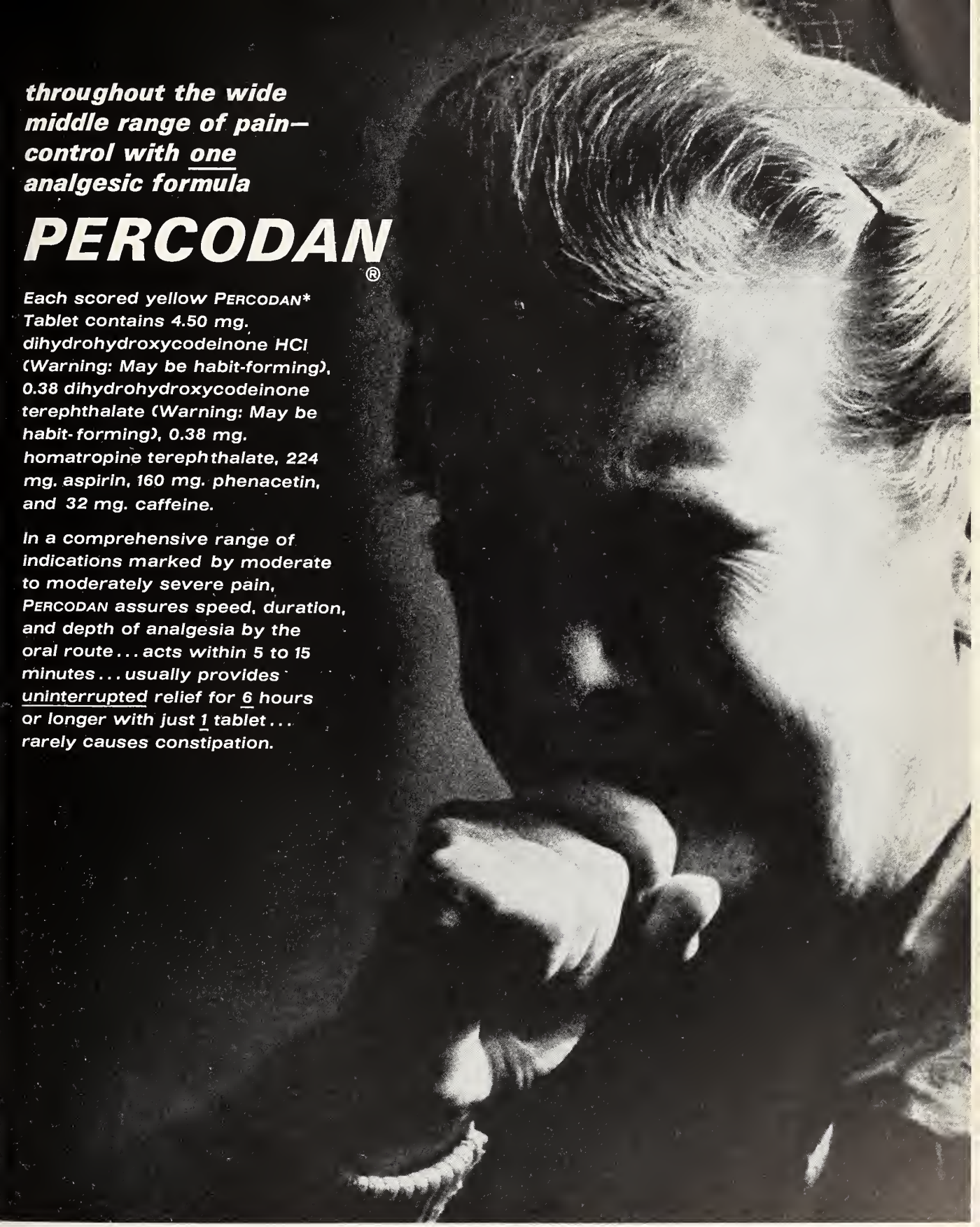
Our first program of the auxiliary year is the Area Workshops. These workshops are designed to give the county officers and committee chairmen information needed to promote our objectives and advance the auxiliary work. The state chairmen will meet with the county chairmen, give detailed information and specific instructions in her particular field. The exchange of ideas with the sharing of information and the friendly communication of all who serve is the key to a successful year.

Our three vice-presidents have planned and will preside at the area meetings as follows:

Northern Area September 10th	—Mrs. Perrie Q. Row 6712 Hohman Ave. Hammond	—Honeywell Memorial Bldg. Wabash
Central Area September 11th	—Mrs. Kenneth Schneider Nashville	—ISMA Headquarters 3935 N. Meridian Indianapolis
Southern Area September 12th	—Mrs. Alfred B. Scales Holland Rd. Huntingburg	—French Lick Hotel French Lick

The "Auxiliary at Work" is informative, interesting and enjoyable. All doctors' wives are urged to attend these workshops, thus indicating a willingness to Serve and Communicate.

Zelda K. Sullivan



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Each scored yellow PERCODAN* *Tablet contains 4.50 mg. dihydrohydroxycodeinone HCl (Warning: May be habit-forming), 0.38 dihydrohydroxycodeinone terephthalate (Warning: May be habit-forming), 0.38 mg. homatropine terephthalate, 224 mg. aspirin, 160 mg. phenacetin, and 32 mg. caffeine.*

In a comprehensive range of indications marked by moderate to moderately severe pain, PERCODAN *assures speed, duration, and depth of analgesia by the oral route... acts within 5 to 15 minutes... usually provides uninterrupted relief for 6 hours or longer with just 1 tablet... rarely causes constipation.*

Average Adult Dose—1 tablet every 6 hours. **Side Effects and Contraindications**—Although generally well tolerated, PERCODAN may cause nausea, emesis, or constipation in some patients. PERCODAN should be used with caution in patients with known idiosyncrasies to aspirin or phenacetin, and in those with blood dyscrasias. **Also available:** PERCODAN®-DEMI, containing the complete PERCODAN formula but with only half the amount of salts of dihydrohydroxycodeinone and homatropine. Both products are on oral Rx in all states where laws permit. Narcotic order required. **Literature on request.**

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Delivered Before the AMA House of Delegates, Traymore Hotel, Atlantic City, N. J., June 19, 1963.

House of Delegates Report

EDWARD R. ANNIS, M.D.
President
American Medical Association

TODAY I HAVE a feeling of intense pride and profound gratitude. I am genuinely proud of this organization, the American Medical Association—an association with a glorious past, a truly marvelous present and a future both challenging and limitless. I am deeply grateful that I have been given the honor to serve as your president, to represent the more than 200,000 members of an organization that has contributed so greatly to the advancement of medical science and to the betterment of the public health.

During the past two years—first with the National Speakers Bureau and then as your president-elect — my travels have taken me into 40 states. These speaking trips have been stimulating and fruitful. They have given me a rare opportunity to observe the continuing progress of medicine and how its benefits flow to the American people, our patients, along an endless conduit composed of researchers, teachers and physicians. Like the legs on a three-legged stool, these essential elements of medical progress must function in concert; the success of all depends on the strength and integrity of each of the three performing his particular assignment with wisdom and dedication.



You will agree with me, I'm sure, that our indebtedness to the nation's researchers is beyond measure. Within the past decade or two, medical research has eclipsed man's most optimistic expectations. The achievements of the researchers in our laboratories, in our hospitals and even in outer space have immeasurably expanded our ability to detect, to prevent and to treat diseases of man while adding to his adaptability to new and challenging environments.

But research would have only limited value without dedicated teachers to translate discoveries into learning so that the end product of medical education, the physician, will be better equipped to bring to his patient the highest quality of medical care. Education beyond the classroom is also vital to medical progress, since it is through the individual physician, and often through the efforts of many working together, that patients finally obtain the benefits of research.

The roles of researcher, teacher and clinician frequently are combined in our great medical centers as physicians demonstrate their willingness to share knowledge, ideas and responsibilities as they accept each new challenge and grasp each new opportunity to expand the medical horizons of this, the space age.

This is a big country. Like its climate and its terrain, its medical problems are many and varied. People who live in the hills have different problems than those who reside in the valleys. And the medical problems of great cities often do not exist in the smaller communities which dot our nation. Wise solutions of problems in one area may have no practical application in another.

Therefore, honest and honorable physi-

cians have dedicated themselves to finding solutions to their own problems, without trying to make their decisions apply universally. For example, in northern New England I have seen demonstrated a need for medically-trained ski patrols because of patient needs attendant to the weekend visits of the thousands who take to the slopes when the snow is right. But winter ski patrols would serve no useful purpose in Miami where we have our own specific medical problems by virtue of exposure to the sun, the sea and the Everglades.

In Unity Lies Our Strength

So just as the strength of America is grounded on strong local government with individual responsibility, so also the strength of medicine is derived from the individual physician and his ability to work with his fellow physicians in the solution of basic problems everywhere, along with his additional acceptance of responsibility to solve those problems which may be uniquely his own or his confreres.

Now more than ever before, there is an obligation for all of us to waive or at least minimize any differences *between* or within regions, specialties or organizations and to stand together on fundamental principles of medical care and medical practice, of enterprise and freedom for which our great association has striven in the last 116 years.

To weaken ourselves from within when the enemy without is bold, strong and tough would be extreme folly on our part. To stand firmly united is a source of strength to all our members and our allies and a deterrent to our foes.

We already know that the united efforts of medicine and its allies in the health field, working via the many channels of communication, have encouraged and stimulated great medical progress. Our new drugs and new surgical technics have become of inestimable value because many have labored so that the greatest number of physicians could be made aware of their existence, their use and their potential.

The American Medical Association especially has been in the forefront in the dissemination of new scientific information. Through its world famous journal and the 10 specialty journals, through great medical postgraduate sessions such as this 112th Annual Meeting, and through its scientific councils and committees, the AMA has been the scientific leader in the world as it brings to its members and all physicians the new ideas of research, the new findings and the practical application of new knowledge, so that you and I can dispense it to our patients.

As a result of a job well done in this field of scientific medicine, which is the prime reason for our existence, the AMA has gained both influence and respect. And these together form a bulwark for the tremendous potential for future accomplishment.

But the ultimate measure of the success of our scientific endeavor can be gauged only as it is reflected in the betterment of the public's health.

In a big nation it takes a big organization to serve a big profession and a big population scientifically. The founders of the AMA dedicated our organization to the promotion of the science of medicine, and for more than 10 decades men and women of medicine have carried out this purpose. In this age of space it is our duty to renew and redouble our scientific efforts so that our American people may live well and live even longer.

Tell the People the Real Story

Americans hunger for news about medicine. Repeatedly in press, radio and television conferences I have been asked about new developments in medicine and what they hold for our people. Indeed, public interest in health and medicine may be at an all-time high as evidenced by 1. the popularity of medical TV programs 2. the wide use being made of the AMA public service spots on television (335 stations using an average of 20 a month) 3. the fact that 2,200 radio stations are using AMA "Health Tip of the Day" spots 4. the increasing number of health articles appearing in magazines, trade publications and house organs 5. the number of health columns being carried by newspapers in addition to news and feature articles on health subjects, and 6. surveys of newspaper and

magazine readership which show health and medical articles at the top or near the top in popularity.

Because of this avid interest of the American people we must continue to inform them about the American Medical Association as a scientific organization which has the knowledge, the know-how and the means of distribution to assure them of the best that medicine can offer.

I feel that if we can continue to tell the true story of American medicine through the press, radio, television and magazines, there will be an increased public understanding of health and health problems, an increased public understanding of the American Medical Association and an increased public understanding of our unique system of medical care and its advantages. I can say with honesty that a truly remarkable job has been done by the officials and staff of the AMA, by state and county medical societies and by hundreds of individual physicians in a great effort to bring to the people the real story of American medicine and its achievements.

Still, more can be done. For example, as a number of physicians and others have suggested to me, the AMA might undertake a regular nationwide television program devoted to the science of medicine and the conquest of disease. The story of medicine has excitement, drama and tremendous human interest. Such a national program, I'm sure you will recognize, has vast possibilities for enhancing public understanding of the truly marvelous story of medical science. Certainly it would be an expensive undertaking, and I am not proposing it; I am simply passing along one idea for your consideration.

When the people have the truth and the facts about American medicine and the AMA, they will become aware of the preeminent position of medicine in the United States compared with other countries and they will resist with increasing strength the efforts to impose upon them any inferior alien system, no matter how it is disguised.

Unfortunately for the medical profession and its patients, a kind of plague has filtered across the face of medicine in recent years, spread by political opportunists who are dedicated to the destruction of medicine as a free institution as a means of gaining economic and political power over the American people. Their tools are those of the charlatan and the demagogue—misrepresentation, false labels, half truths. With emotional appeals designed to stir the heart strings of America, they have fabricated a false portrait of need and destitution, they have sought to create a distorted image of American medicine, they have tried to downgrade private enterprise, to condemn individual initiative and self-reliance, and to discredit constitutional government with its checks and balances and safeguards designed to protect our liberties. And they have criticized worthwhile legislation as they have proposed compulsory, federalized programs as the cure-all for the ills they conjure up.

Fortunately, most Americans are honest, intelligent and wise in their ultimate decisions when they know and understand the extent of a problem. Wherever our position is known and understood, we have strong support. Those who know the true story of medicine recognize its real worth, and they are willing to work with us to correct any shortcomings and to improve the distribution of medical care to all of our citizens irrespective of their financial condition.

AMA Holds the Key Position

Those who know and understand medicine, its deficiencies as well as its virtues, are our strongest allies, but the threat to medicine will continue as long as false leaders seek political advantage in promising something for nothing, in promising panaceas which they are unable to deliver. This threat will continue until the time when you and I have successfully brought our story to the American people.

I remind you that the onslaught of the socializers and the adversity of recent years have not been totally to our disadvantage. Our patients, the American public, have been alerted to examine our system of medical freedom and to compare it with what they hear and read about the government-

Continued on Page 1044



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'Deprol' avoids these "seesaw" effects; it relieves both depression and anxiety. Moreover, it does not cause liver damage, psychotic reactions or changes in sexual function.

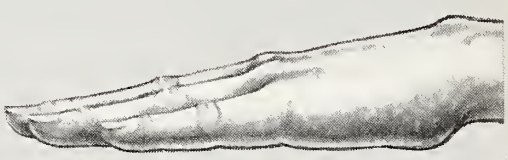
Slight drowsiness and, rarely, allergic reactions, due to meprobamate, and occasional dizziness or feeling of depersonalization in higher dosage, due to benactyzine, may occur. Meprobamate may increase effects of excessive alcohol. Use with care in patients with suicidal tendencies. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction. Withdraw gradually after prolonged use at high dosage.

Energizers relieve depression

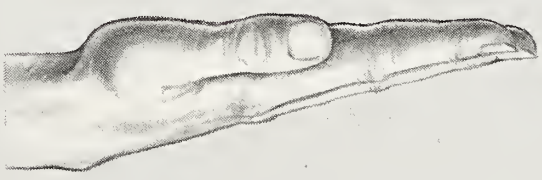




Tranquilizers reduce anxiety



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Usual Dosage: 1 tablet q.i.d. May be increased gradually, as needed, to 3 tablets q.i.d.; with establishment of relief, may be reduced gradually to maintenance levels.

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controlled system in other lands. And the comparison is all to our advantage. We also have seen a closing of our own ranks, a greater appreciation of our common goals, and a greater loyalty developed within the profession itself.

As Doctor Fister recently said: "Our profession has always grown stronger in the face of crisis. These past few years will be recorded as those in which the medical profession has gained significant victories for the free practice of medicine."

The American Medical Association has the vitality and the strength and the opportunity to serve as a nationwide forum for all allied health groups and for all who are sincerely dedicated to improving the nation's health.

There are so many dedicated persons in this nation whose aims and objectives are akin to our own—local, state and national statesmen honestly concerned about the health of our people, churchmen, welfare workers, farmers, businessmen, lawyers, community leaders, innumerable representatives of voluntary health agencies, and great numbers of co-professionals in allied health fields—all of whom can be brought into one great council to promote good health, to improve the quality and distribution of medical care which all honest men and women desire, and equally important, to turn the tide back toward a national dedication to the fundamental values of individual liberty and less concentration of power in the federal government.

The American Medical Association is the vehicle which can blend all of these multiple efforts under one cooperative and effective banner.

Work Must Precede Success

Destiny lies with us if we but assert the statesmanship and the leadership which are so necessary to achieve these ultimate goals. But the role of leadership carries great responsibilities, and responsibilities must begin at home.

We must continuously expand our efforts to see that no one is denied medical care because of inability to pay. We must strengthen all programs to place physicians where they are needed.

We must increase our support of medical education.

We must double and triple our contribution to the student loan fund so that more students can help themselves obtain an education.

We must continue to study, to work and to bring the results of all these efforts—and hundreds more—to our patients.

We need cooperation with one another as never before, because how can we ask of others more than we ask of ourselves?

This will not be an easy task because, as someone has pointed out, the only place where "success" precedes "work" is in the dictionary.

Our effort may not be inexpensive because that which is good cannot be obtained quickly, cheaply. If we expect great things from a great organization for a great profession and for a great nation, we must be willing to bear the cost in time, in endeavor, and in dollars.

And finally, we cannot with impunity diminish our efforts to win an ultimate victory in the political war which has been thrust upon us. We have heard from several quarters that the Administration and its allies have become so preoccupied with other legislative priorities that the King-Anderson Bill will be permitted to languish in committee the remainder of this year.

And well it might. Nevertheless, hearings on this issue have been tentatively scheduled for mid-July and I for one would not care to predict what course the Administration will pursue following the hearings.

You may be sure that we will present the committee with an abundance of truth and fact to support our case that this legislation would be detrimental to the nation's health and would be unwise, unjust, economically unsound as well as totally unnecessary.

But it is also imperative that we be prepared for any eventuality, that we anticipate any move the Administration might make in the hope of catching us off guard. We cannot know for sure what strategy the

Administration is planning. It would be unmitigated folly for us to allow ourselves to become complacent and inactive on the assumption that our enemies will bivouac until sometime next year. Our campaign must be geared not just to the possibility but to the probability that the Administration will launch a massive assault this year.

If so, we must be ready. If not, we will have gained immeasurably by taking advantage of the time and opportunity to move forward toward our ultimate goal—the creation of a nationwide climate so overwhelmingly opposed to this legislation that even its most ardent congressional advocate will have no taste for it at any time in the foreseeable future.

Again, may I suggest that in this endeavor, work will precede success.

The Imperative Word

Sixty years ago when Sir William Osler addressed the students of Toronto on the subject of "The Master Word in Medicine" he said:

"It seems a bounden duty on such an occasion to be honest and frank, so I propose to tell you the secret of life as I have seen the game played and as I have tried to play it myself.

"You remember in one of the jungle stories that when Mowgli wished to be avenged on the villagers, he could only get the help of Hathi and his son by sending them a master word. This I propose to give you, in the hope, yes, in the full assurance, that some of you at least will lay hold upon it to your profit. Though a little one, the master word looms large in meaning. It is the open sesame of every portal, the great equalizer in the world, the true philosopher's stone which transmutes all the base metal of humanity into gold.

"The stupid man among you it will make bright, the bright man brilliant, and brilliant student steady. With the magic word in your heart all things are possible, and without it all study is vanity and vexation. The miracles of life are with it; the blind see by touch, the deaf hear with eyes; the dumb speak with fingers. To the young it brings hope, to the middle-aged confidence, to the aged repose. True balm of hurt minds, in its presence the heart of the sorrowful is lightened and consoled.

"It is directly responsible for all the advances of medicine during the past 25 centuries. . . . Not only has it been the touchstone of progress, but it is the measure of success in everyday life. Not a man before you but is beholden to it for his position here, while he who addresses you has that honor directly in consequence of having had it graven on his heart when he was as you are today. And the master word is work, a little one as I have said, but fraught with momentous sequences if you can but write it on the tablets of your heart, and bind it upon your forehead."

As students of the present and with hope for the future, we may again review Osler's prophetic closing remarks in which he said:

"Much has been done, much remains to do; a way has been opened, and to the possibilities in the scientific development of medicine there seems to be no limit."

Ladies and gentlemen, let us get on with *our work.* ◄

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Report on Actions of the House of Delegates

American Medical Association
112th Annual Meeting
June 16-20, 1963
Atlantic City

TWO INDIANA PHYSICIANS were elected to high posts in the American Medical Association at the national organization's annual meeting June 16 to 20 in Atlantic City.

Dr. Lester D. Bibler, Indianapolis, was elected to a two-year term on the AMA's Board of Trustees and Dr. Francis L. Land, Fort Wayne, was named a member of the Council on Medical Education and Hospitals.

James A. Waggener, executive secretary of ISMA, was re-elected secretary-treasurer of the Conference of Presidents and Officers of State Medical Associations.

ISMA delegates, alternate delegates and officers attended the annual meeting. Dr. Jack Shields, Brownstown, served as a member of the reference committee on Legislation and Public Relations.

Enlargement of the board of trustees, the sections and scientific program of the AMA, interns and residents, a new Institute for Biomedical Research, a physician's pension plan and the relation between tobacco and disease were among the major subjects acted upon by the House of Delegates.

Dr. Norman A. Welch, Boston, member of the House of Delegates since 1951 and speaker of the house since 1959, was named president-elect of the Association by acclamation. Dr. Welch will become president at the June, 1964, annual meeting in San Francisco, succeeding Dr. Edward R. Annis, Miami, Florida, who assumed office at the Tuesday night inaugural ceremony in Atlantic City.

The AMA 1963 distinguished service award was voted to Dr. Lester R. Dragstedt, Gainesville, Florida, research professor of surgery at the University of Florida School of Medicine, for his achievements in the fields of education, research and practicing surgery.

Final registration figures at the meeting reached a grand total of 36,811, including 12,924 physicians.

Board of Trustees

The house adopted amendments to the Constitution and Bylaws designed to implement the recommendations presented in June, 1962, by the Ad Hoc Committee on the Board of Trustees. The changes will increase the size of the board from 11 to 15 members, by adding three elected trustees and including the immediate past president for a one-year term.

The amendments also set the term of office for elected board members at three years and limit the number of terms to three, for a maximum total of nine years service. In approving the amendments, the house expressed the opinion that enlargement of the Board of Trustees "would improve communications between the board and the association" and that the proposed changes "would be consistent with the increase in membership of the association and with the increase of the size of the House of Delegates."

AMA Sections and Scientific Program

In considering the report of the ad hoc committee to study the board of trustees report on the Sections and Scientific Program of the AMA, originally presented at the 1962 clinical meeting in Los Angeles, the house disagreed with some recommendations in both of those reports.

Major change was the house decision that all section officers—chairman, vice chairman, delegate, alternate delegate, secretary, assistant secretary and representative to the scientific exhibits—should be elected by

members of the section and that no officers be appointed by the AMA board of trustees.

In another change, relating to nominations for specialty boards, the house approved the following recommendation: "The Committee of the Council on Scientific Assembly of the appropriate section shall nominate the AMA representatives to serve on the medical specialty certifying board. These nominations shall be submitted to the Board of Trustees."

In connection with section registration, the house decided that "a member of a section who desires to change his registration from one section to another because of a change in his specialty, shall be required to inform AMA headquarters by written notice of this intention at least sixty days in advance of the annual meeting."

The house agreed with the ad hoc committee's recommendation that the Section on Gastroenterology and Proctology be renamed the "Section on Gastroenterology" and that a separate "Section on Proctology" be established.

The house also commended the Board of Trustees for its recommendation that a national forum be sponsored by the AMA in which representatives of national medical specialty societies and the Academy of General Practice will participate. The Board of Trustees was directed to implement this suggestion as early as possible.

Interns and Residents

The house disapproved the report of the Council on Medical Service and the Council on Medical Education and Hospitals on Compensation of House Officers. In so doing, it adopted the following statement:

"We therefore recommend that in view of the overwhelming opposition to the basic proposal contained in the report of the Council on Medical Service and the Council on Medical Education and Hospitals, the AMA record itself as opposed to any system or program by which any part of an intern's or resident's salary is paid out of fees collected by the attending physician or out of fees collected under any type of medical-surgical insurance coverage."

The house, while declaring that the joint council report "represents a well-intentioned effort to find a solution to a most difficult, if not impossible, problem," recommended that any future proposals on the compensation of house officers be thoroughly studied by the Law Department and Judicial Council before submission to the House of Delegates.

In another action, related to the controversial "25% rule," the house approved a revision of the Essentials of an Approved Internship which deletes the requirement for any stated proportion of foreign medical graduates and graduates of American and Canadian medical schools as an essential feature of any internship program.

New Research Institute

In acting upon two reports from the AMA Education and Research Foundation, the house approved the foundation's announcement that it will establish and operate a new Institute for Biomedical Research.

The institute will concern itself with intensive and fundamental study of life processes particularly as related to intracellular mechanisms. It will be composed of groups of dedicated, imaginative workers who are capable of significant scientific achievements through the interaction of their intellects and experiences, with unmatched facilities and maximum freedom from external pressures.

The institute will be dedicated to pure, basic, non-disease oriented research, and it will not render medical service to patients and will not conduct a graduate training program leading to a degree. It is contemplated that the first research group should be functioning by early 1965.

Physicians' Pension Plan

The House approved establishment of an AMA physicians' pension plan under the provisions of the Self-Employed Individuals' Retirement Act of 1962, and noted that the Board of Trustees will make every effort to begin operation of the plan before the end of 1963 so that physicians will be able to participate this year.

The plan will be open to all AMA members and their employees who can qualify

under the Act, Public Law 87-792 (Keogh Law).

The law allows a self-employed individual to set aside up to $2,500 or 10% of his annual income, whichever is less, in a retirement fund, with the first $1,250 being deductible. The individual must provide proportionate benefits for any employee who works for him more than 20 hours a week and more than five months each year.

Tobacco and Disease

The House agreed with a Board of Trustees report which concluded that the AMA should defer any definitive statement regarding the relationship of tobacco and disease. The report pointed out that the AMA is continuing its study of this important subject and is merely deferring any public pronouncement pending the availability of more information, including whatever may come from the study of a committee appointed by the United States Public Health Service.

In taking this action, the house declared that extensive research is still necessary for the complete answers on the cause and effect of many toxins, including tobacco. However, the house said that the AMA "has a duty to point out the effects on the young of the use of toxic materials, including tobacco, and these facts should be disseminated, particularly in our schools."

Miscellaneous Actions

In considering a wide variety of resolutions and reports, the house also:

Disapproved a Judicial Council opinion on the dispensing of glasses by ophthalmologists "solely for profit" and reaffirmed the Council's interpretation of Section 7 of the Principles of Medical Ethics, which provides that "drugs, remedies, or appliances may be dispensed or supplied by the physician providing it is in the best interests of the patient."

Approved a Judicial Council opinion on physician ownership of drugstores, drug repackaging houses and pharmaceutical companies which held that it is unethical for a physician to have a financial interest in a drug store, drug repackaging company or to own stock in a pharmaceutical company which he can control or does control while actively engaged in the practice of medicine.

Approved of AMA participation in the recent formation of a Joint Commission on Medicine and Pharmacy.

Agreed with the Council on Legislative Activities that the house should take no official position on the "Liberty Amendment" but should call it to the attention of individual physician citizens.

Disapproved of federal funds for staffing new community mental health centers.

Took a position opposing the student loan provisions of the Health Professions Educational Assistance Act of 1963.

Urged all state and county medical societies to adopt and activate all phases of "Operation Hometown."

Recommended that local medical societies in the vicinity of medical schools assume the responsibility of establishing and maintaining clear lines of communication with medical students.

Approved the organization of the new National Council for the Accreditation of Nursing Homes, jointly sponsored by the AMA and the American Nursing Home Association.

Adopted the recommendations of the Committee to Study the Joint Commission on the Accreditation of Hospitals and suggested that the committee's report be distributed to constituent and component societies and hospital chiefs of staff.

Approved an alteration in the Association Bylaws which states: "The Council on Medical Education and Hospitals shall consist of 10 active or service members at least one of whom shall be a private practitioner of medicine who is not a faculty member of a medical school nor a member of a staff of a hospital associated with a medical school or university."

Commended the American Farm Bureau for its vigorous leadership in opposing unwarranted government interference and regulation.

Urged the widest dissemination to AMA members of a joint report by the AMA Council on Mental Health and the National Academy of Sciences-National Research Council on The Use of Narcotic Drugs in

Medical Practice and the Medical Management of Narcotic Addicts.

Recommended that all AMA members and affiliates give strong support to the national tuberculin testing campaign proposed by the American School Health Association.

Directed the speaker of the house to appoint an ad hoc committee to study the size, make-up and functions of the House of Delegates, its councils, sections and committees and to report its findings in June, 1964.

Opening Session

Dr. George M. Fister of Ogden, Utah, retiring AMA president, told the opening session that "our fight against federal dictation is not merely one of concern only to physicians and their freedom to practice the best medicine possible, but it also concerns, equally or more so, the individual citizen, all professions and the private enterprise system in this country." Awards announced were the AMA Scientific Achievement Award to John F. Enders, Ph.D., Boston, and the Joseph Goldberger Award in Clinical Nutrition to Dr. John B. Youmans, New York City.

Inaugural Ceremony

Dr. Annis, in his inaugural address, stressed the importance of maintaining an attitude of individualism among the physicians of America, and he urged members of the profession to have the courage and individuality to fight for all political, economic and professional freedoms. The Distinguished Service Award was presented to Dr. Dragstedt, and the Scientific Achievement Award was presented to Dr. Enders.

Wednesday Session

Speaking at the Wednesday session, Dr. Annis declared that "now, more than ever before, there is an obligation for all of us to waive or at least to minimize any differences between or within regions, specialties or organizations and to stand together on fundamental principles of medical care and medical practice, of enterprise and of freedom for which our great association has striven in the last 116 years."

Election of Officers

In addition to Dr. Welch, the new president-elect, the following officers were named at the closing session on Thursday:

Dr. D. F. Ward, Dubuque, Iowa, vice-president; Dr. Milford O. Rouse, Dallas, Texas, speaker of the house, and Dr. Walter C. Bornemeier, Chicago, vice-speaker.

Dr. Percy Hopkins, Chicago and Dr. Raymond M. McKeown, Coos Bay, Oregon, were re-elected to the Board of Trustees for three-year terms. Dr. Robert C. Long, Louisville, Kentucky, was named to fill the one year remaining in the term of Dr. Hugh H. Hussey, who resigned to become director of the AMA Division of Scientific Activities.

Elected to the three new posts on the board, created by the house action on Wednesday, were Dr. Dwight Wilbur of San Francisco, three years; Dr. Bibler, two years, and Dr. L. O. Simenstad, Osceola, Wisconsin, two years.

Nominated and elected to the Judicial Council was Dr. Walter Judd, Minneapolis, physician, former member of Congress and 1961 winner of the AMA Distinguished Service Award.

For the Council on Constitution and Bylaws, Dr. William D. Stovall, Madison, Wisconsin, was re-elected, and Dr. Thurman B. Givan, Brooklyn, New York, was named to replace Dr. Bornemeier.

Elected to the Council on Medical Education and Hospitals were Dr. E. Bryce Robinson, Jr., Fairfield, Alabama; Dr. Land and Dr. Melvin Breese, Portland, Oregon.

To fill vacancies in the Council on Medical Service, the house elected Dr. Burns A. Dobbins, Jr., Fort Lauderdale, Florida; Dr. Irvin E. Hendryson, Denver, Colorado, and Dr. Jess W. Read, Tacoma, Washington.

By acclamation at the opening session, the house also expressed appreciation for the services of Mr. C. Joseph Stetler, the association's general counsel and director of the Legal and Socio-Economic Division, who will be leaving July 1st to become executive vice-president and general counsel of the Pharmaceutical Manufacturers Association ◄

F. J. L. Blasingame, M.D.
Executive Vice-President
American Medical Association

Lilly Psychiatric Drug Application "Stands Up" 45 Ft. to be "Counted"

THE LARGEST new drug application (NDA) ever submitted by Eli Lilly and Company—all 8,000 pages of it—has been sent to the Food and Drug Administration in Washington. The application covers a drug for use in the psychiatric field.

The NDA is one of the first processed by Lilly under the new FDA regulations issued in accordance with the Drug Amendments of 1962.

It would take one of the FDA reviewing officers 58-hour working days to read the Lilly NDA if he spent only three minutes on each page.

The new drug application contains detailed reports on the new medicine—its chemistry, its activity in animals, its therapeutic action and side-effects in human beings. Formerly summaries of this information were sufficient for the FDA, but now they must be accompanied by individual reports on the use of the drug in each animal and each subject or patient by each investigator.

Some 150 investigators studied the new Lilly drug in 2,170 subjects. The enormous task of analyzing the data was done in part by electronic computer. It was possible to encode the data from 1,888 patients for the computer.

A Lilly spokesman said that the larger NDA does not mean that more clinical work is being done by Lilly but merely that more records and reports are obligatory.

Each copy of the Lilly application stands 34 inches high. The government gets three copies. The company also put together thirteen for its own use and for the use of other



SOME 128,000 poges of reports from the chemicol, phormocologicol, ond clinicol investigotions of o new drug ore shown being colloted by employees of Eli Lilly ond Company. The mass of poper work will fill sixty-four volumes which moke up sixteen copies of o new drug application. If put into o single stock, they would stond 45 feet 4 inches high.

organizations, such as the American Medical Association.

If all sixteen copies were put into a single stack, it would be 45 feet 4 inches tall.

A group of Lilly employees worked many hours of overtime collating some 128,000 pages of reports into the sixty-four volumes and related summaries of the sixteen NDA's.

The Lilly spokesman traced the growth of the new drug applications in recent decades. In 1940, he said, the average NDA was six pages long. By 1950, it was sixty; and by 1960, almost 600 pages. Now it is clear that a 6,000-page application could be the rule rather than the exception.

An NDA for another drug recently investigated by Lilly under the old regulations would have run at least 10,000 pages if the new rules had been in effect. ◄

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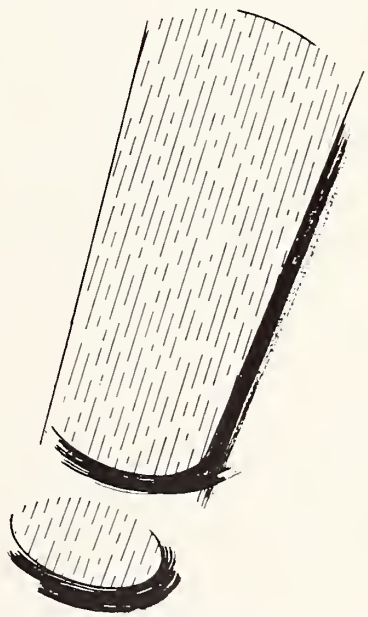
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Gleaned from the British Medical Journal

JACK W. HICKMAN, M.D.
Indianapolis

A relatively new approach to the treatment of the dumping syndrome is presented by Howe et al.[1] This troublesome, aggravating condition which is probably the commonest cause of distress after partial gastrectomy or other operative procedures for duodenal ulcer, has resisted numerous attempts at correction in the past. These authors present a series of patients whom they treated with relatively small doses of insulin before each meal. The dose had to be adjusted closely and varied from 5 to 25 units, the average dose being 12½ units, and was given on an average of 50 minutes before meals. The optimal dose that the authors were looking for was one that would depress the patient's blood sugar level immediately before a meal to the lowest level possible without producing frank symptoms of hypoglycemia. Approximately 90% of the patients showed some benefit from this regime, although only about 50% showed striking improvement. These results certainly are encouraging, and it is a relatively simple method of treatment that should be kept in mind. The obvious drawback, of course, is that it requires an insulin injection and patient cooperation. It would be interesting to see a report of a similar study done with oral hypoglycemic agents.

* * *

A moderate, low-grade anemia of a hypochromic normocytic type is seen fairly frequently in patients with rheumatoid arthritis. However, a report by Partridge and Duthie[2] draws attention to a less frequently recognized macrocytic anemia in these patients. These authors report on 35 patients with rheumatoid arthritis and macrocytic anemia. The incidence of this anemia was found to be approximately six times higher than that in the general population. Numerous etiological possibilities are mentioned in the paper, but the authors seem to project the possibility that there may be a circulating antibody present which attacks the intrinsic factor to prevent the utilization of vitamin B-12 after absorption. The response to vitamin B-12 therapy was adequate; however, it was not as prompt as was expected judging from the usual response of straightforward Addisonian pernicious anemia patients. The actual increased incidence of these two conditions may prove to be more significant in the future than it first appears to be since other studies have suggested the possibility of pernicious anemia being an auto-immune disease.

* * *

Most reports by Owren cause one to give them serious thought and consideration, and his most recent paper is no exception. In it, Egeberg and Owren[3] present interesting data on 10 normal, healthy women in whom they measured blood coagulation factors while half of these patients were on an oral contraceptive agent. The drug tested was "Enovid" (norethynodrel-ethynylestradiol 3-methyl ether). Their studies showed that the patients developed an increased level of factor VIII and factor VII activity while they were on therapy with "Enovid." There was no change noted in the blood samples obtained from patients who were not taking this medication. Because of the recent reports of thromboembolic phenomenon occurring in patients with this and similar medicines, this report may be of considerable significance and tends to support the belief that hypercoagulability of the blood may very likely be an untoward effect of these agents.

* * *

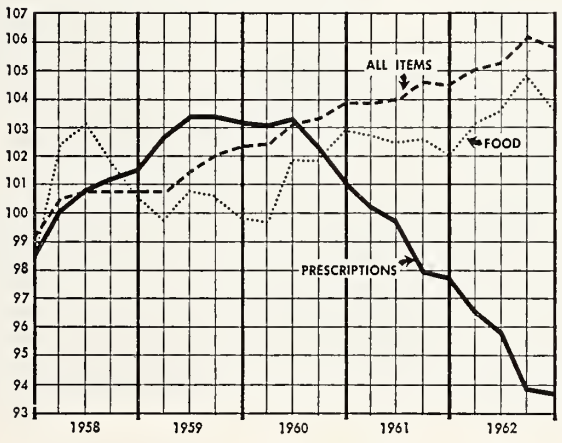
Negative reports are certainly of value, and a report by Stanfield[4] of his evaluation of "Chymoral" in the therapy of mucovisci-

dosis is worth noting. This investigator treated 22 children with mucovisicidosis from age four to 17 with chymoral tablets over a three-month period. This group was then compared with a controlled series of 11 children with the same disease of approximately the same severity who received placebos. There were no changes noted in the ventilatory functions as measured by forced vital capacity and one-second forced expiratory volume. This report is in contrast to the results obtained by Bruce and Quinton, and further studies will be needed to clarify any potential benefit from this medication in this puzzling condition.

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Retail Prescription Drug Prices Down



Consumers are paying consistently lower prices for prescription drugs, while the cost of living generally continues to rise, U. S. government figures show. A comparison of retail drug prices with the prices of food and with all commodities for the past five years shows that drug prices began to drop in 1960 and have continued downward ever since, reaching a new low at the end of 1962. Other prices have followed an upward trend over the same period. (Source: U. S. Bureau of Labor Statistics, Consumer Price Index. Base, 1957-59 = 100. Distributed by Pharmaceutical Manufacturers Association.)

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Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Res Ipsa Applicable Where Patient Suffers Abscess from Insertion of Enema Tube—This was an action by a patient against a hospital for a perirectal abscess and resulting fistula allegedly caused by a presurgical enema given by a nurse. Patient testified that four attempts were made by the nurse to insert the tube, that each time he felt a painful, tearing sensation. Examination later revealed an abscess, which necessitated several weeks of treatment. Surgery was required later to close a resulting fistula.

The court held that the doctrine of res ipsa would apply if the insertion of the enema tube was the cause of the abscess. The court said that it is common knowledge that the giving of an enema is not ordinarily harmful unless negligently done. The court stated that res ipsa applies where the occurrence of the injury is of such a nature that it probably was the result of negligence by someone and that the defendant is probably the person responsible.

The applicability of res ipsa thus depends on the determination of the factual issue whether the giving of the enema was the cause of patient's injuries. It was for the jury to make that determination. Since there was sufficient evidence to permit a finding for patient on the issue, he was entitled to a conditional instruction making res ipsa applicable in the event of such a finding.

Davis v. Memorial Hospital, 376 P. 2d 561 (Cal., Dec. 6, 1962).

Doctor's Failure to Comply with Patient's Request Not Cause of Injury—The failure of a doctor to comply with a patient's request for a particular kind of treatment did not justify an award of damages, where there was no proof that the doctor's action, even if it were negligent, was the proximate cause of injury suffered by the patient. A judgment in favor of the patient was reversed by the Court of Appeals of Maryland and a new trial was ordered.

The patient, a laboratory technician, cut her hand on a broken test tube. She rushed to a hospital for emergency treatment and was treated by a resident of Philippine origin. She told him that, if a tendon was severed, she did not want the wound sutured but wanted the tendon to be taken care of immediately. The resident sutured the wound, but it was later discovered that the tendon was severed.

Medical testimony established that the majority of surgeons follow the practice of secondary repair, in which the wound is closed first and the tendon is repaired later, while only a few follow the practice of primary repair, in which the tendon is repaired first. Although in this case the procedure of secondary repair was unsuccessful and the patient was left with a permanently rigid finger, the court said that there was no evidence that the resident's action had caused this result. It said that the jury should not have been permitted to speculate as to what the results might have been if the other procedure had been followed.

Suburban Hospital Association v. Me-

whinney, 187 A. 2d 671 (Md., Jan. 29, 1963).

New Trial Ordered for Hospital in Death Following Gastrectomy—A wrongful death verdict against a hospital for the death of a patient following a subtotal gastrectomy was held to be contrary to the weight of the evidence. An intermediate appellate court in New York reversed the judgment against the hospital and ordered a new trial.

The widow of the patient claimed that a hospital employee had, by mistake, given the patient solid food four days after the operation. It was alleged that the food caused a disruption of the duodenal stump which caused peritonitis which, in turn, caused the death of the patient. The widow's medical witness testified that the eating of the food was "the competent producing cause" of the patient's death. He also testified, however, that the disruption of the duodenal stump may have occurred hours before the food was eaten. In these circumstances, the court held that the verdict against the hospital was clearly contrary to the weight of credible evidence.

The court also held that evidence tending to establish that solid food had been given to the patient was improperly admitted. One item was an unsigned affidavit from a practical male nurse. The court said that the justification for the absence of the witness and the lack of a signature were not sufficiently established. It also held that testimony by relations of the patient about statements made by an unidentified hospital employee and by a doctor who was not identified as a hospital employee were improperly admitted.

McNerney v. New York Polyclinic Hospital, 238 N.Y.S. 2d 729 (N.Y., March 26, 1963).

Informed Consent Rule Clarified in Kansas—Three doctors were exonerated of all responsibility in the death of a three-year-old boy during a cardiac catheterization. A claim that informed consent was lacking was rejected. The Kansas Supreme Court affirmed the judgment of a trial court which held that the evidence presented was insufficient to present to the jury.

After administration of 500 milligrams of sodium pentothal as an anesthetic, the doctor began inserting the catheter. During the procedure, the boy awakened and started to struggle. At this point, 100 milligrams of sodium pentothal were injected into the blood stream through the catheter. Within 20 seconds a cardiac arrest developed and the doctors were unable to restore normal heart action. About four hours later the boy was pronounced dead.

The parents claimed they were not sufficiently advised of the risks of the procedure to enable them to give an informed consent. The court, in rejecting this claim referred to its earlier decision in *Natanson v. Kline*, 350 P. 2d 1093. It emphasized that the duty of a doctor to disclose risks is limited to those disclosures which a reasonable medical practitioner would make under the same or similar circumstances.

The court noted that the doctors had explained the procedure to the parents and that the parents were aware that some risk was involved. Since there was no evidence

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presented that a reasonable doctor would have given a more detailed explanation, the court held that there was no basis on which a jury could find that the doctors had violated the standard of care prevailing in the community.

Williams v. Menehan, 379 P. 2d 292 (Kan.; March 2, 1963).

No Damages for Mental Suffering Caused by Erroneous Diagnosis—A patient who claimed that she suffered a "tuberculosis phobia" as a result of an erroneous diagnosis made by a physician failed to recover damages. A New York trial court held that there was no cause of action against the physician where the overwhelming evidence showed that the diagnosis and the resulting therapy were medically warranted and constituted no deviation from standard medical practice.

The physician had made a diagnosis that the patient's arrested pulmonary tubercular condition had become active, told her that the germs may have reached her intestines, and administered chemotherapy. The patient was suffering stomach pains which cleared up after the therapy. The court said that there was little reason to doubt that the patient, while she is a highly nervous individual and always apprehensive about her long standing tuberculosis, had become exceedingly conscious of the possibility of the spread of the tuberculosis germ to her intestines and that her physician's statements and treatment have caused her real mental distress.

The court held that the physician's diagnosis, if it were in error, was an understandable error and not a departure from good medical practice and that the chemotherapy was not harmful to the patient. It ruled that a physician should be held liable for mental suffering caused by fright based on his medical advice only in cases of gross negligence, and not where the advice is well founded, not capricious, and does not induce harmful therapy. In speculating on the possible results of a contrary rule, the court said:

> "Had this defendant failed to fully alert plaintiff he could conceivably have been subjected to censure and suit and thus on plaintiff's reasoning, there is jeopardy both for making the disclosure and for withholding it. Were doctors to be made conscious of the possibility of suit for honestly explaining their diagnoses to patients for purpose of swift cure they would, with so hazardous a cloud hanging over them, tend to avoid doing so. What sort of medicine would we then achieve? The practice of medicine would then become a secretive practice with doctors uncommunicative to patients, delaying therapy and withholding information for fear that frightened patients might turn upon them. Indeed, professionals in other fields would also find advice to clients most hazardous if fright were caused thereby. Think of the plight of a lawyer sued by a frightened cardiac client when informed of the poor prospects of a lawsuit or of the size of a proposed fee which could be exceeded by the client's recovery against the lawyer for fright."

Kraus v. Spielberg, 236 N.Y.S. 2d 143 (N. Y., Dec. 20, 1962). ◄

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A Report on the Physicians Account

(One of a series prepared by Blue Cross-Blue Shield)

One of the by-products of the association of ISMA with Blue Shield is the advantage of physicians obtaining Blue Cross-Blue Shield protection for themselves and their dependents through the physicians account. From the beginning coverage has been provided on a group basis, with group fees.

Two years ago, certain underwriting and enrollment regulations were adopted by the Council of the ISMA, and changes were made in the benefits available to physicians. During the physician account open enrollment in 1962, physicians were given a choice of two benefit patterns developed for them, either the professional health care plan, or the professional health security plan.

Briefly, the professional health care plan provides basic Blue Cross coverage, including 365 days of hospital care per admission, two-bed room paid in full and ancillary services paid in full. Blue Shield coverage includes the preferred schedule, 120-day in-hospital medical care and diagnostic services.

The professional health security plan, written especially for physicians licensed in the state of Indiana, includes payment for hospital expenses, private duty nursing, physician expenses, medicines and aids, and expenses for home care, on a deductible basis. After the deductible has been paid, Blue Cross-Blue Shield will pay 80% of the balance. The optional deductible amount is either $250.00 or $500.00, with a $7,500.00 limit per benefit period. With the approval of the Council, the $750.00 and $1,000.00 deductible offers were dropped in 1963 due to limited interest.

We believe the changes adopted by the Council two years ago have contributed significantly to the success of the physicians account during the past year. Presently 43.6% of the physicians in Indiana have Blue Cross-Blue Shield protection for themselves and dependents through the account, and many others are members through hospitals, clinics and other accounts.

Here is a breakdown of the physicians account membership at the time of the 1962 and 1963 open enrollments:

	1962	1963
Health Care Plan	1,610	1,864
Health Security Plan	423	313
$250 deductible	394	300
500 deductible	17	9
750 deductible	3	1
1,000 deductible	9	3

The total number of physicians account certificates in effect at the conclusion of the 1963 enrollment was 2,177.

Another study recently completed by Blue Cross-Blue Shield furnishes some interesting information on utilization in the physicians account. During 1962 there were 169 hospital admissions where the length of stay was 100 days or more. Eight of these long-stay admissions were for members of the physicians account, which is a relatively high figure considering the size of the account.

Within the physicians account, there was one stay of 100 days or more for every 272 certificates, and for our general membership with 100-day or more benefits, the rate decreased to one stay of 100 days or more for every 2,400 certificates. The ratio of long-stay cases within the physicians account was almost nine times higher than for the general membership. Four of the patients in these long-stay cases were physicians, and four were physician's wives.

The cost factors involved are quickly illustrated by a listing of the combined Blue Cross-Blue Shield payments for these eight cases:

Amount Paid	Hospital Days	Amount Paid	Hospital Days
$2,398	120	$ 4,288	111
2,787	120	10,174	352
2,082	104	2,975	112
4,769	181	3,752	106

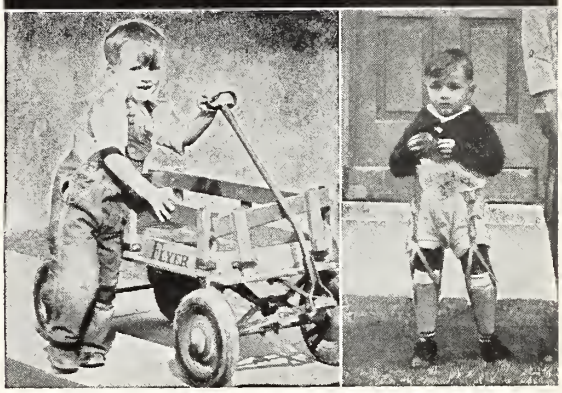
We believe the type of benefits available to the members of the physicians account is adequate to help solve the problems indicated by the above listing of payments, and that the changes made in regulations governing the account will enable us to do an even better job in the future for the physicians in Indiana and their dependents. ◄

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William S. Kenshol, 107 North Main St., Owensville, Ind.

Ray Schale, PHS Indian Hospital, Gallup, New Mexico—available July, 1964.

SPECIALISTS

James L. Clifford, 511 Chalmers Rd., Memphis, Tenn.—*Internal Medicine*

Hallard W. Beard, 310 Sprott St., Killeen, Tex.—*Internal Medicine*

Melvin A. Lester, 135 Fourth Ave., Phoenixville, Penn.—*Ob-Gyn.*

Nello M. Felicelli, 265 Fair Ave., Elmhurst, Ill.—*Ob-Gyn.—also general practice*

Clyde K. Kitchen, USAF Hospital, Sheppard AFB, Tex.—*Ophthalmology—available July 1, 1964*

Robert E. L. Berry, University Medical Center, Ann Arbor, Mich.—*General Surgery*

Ernest E. Weinand, 7257 Sheila St., Millington, Tenn.—*Surgery*

H. J. Halikiopoulos, 7344 Kingsbury Blvd., St. Louis 30, Mo.—*Urology*

LOCATIONS

Madison County—LAPEL—population 2,000. Located equal distance between Anderson and Noblesville—one hospital at Noblesville and two hospitals at Anderson. Community is growing, is a progressive and prosperous community. There are two doctors in the community—one is semi-retired who does office practice only. For further information contact Garland Ricker, President, Lapel Chamber of Commerce or Dr. A. H. Ridgway, Lapel.

Starke County—KNOX—population 4,000—county seat town. Located in the lake region of northern Indiana. 40 bed hospital in the town. Five physicians in the county. Opening for another general practitioner in Knox. For further details contact James F. DeNaut, M.D., Knox, Ind.

Knox County — BICKNELL — population 3,500. Rich farming community with a large trading area. Located 15 miles from Vincennes and 14 miles from Washington where hospital facilities are located. Office space available. There is one full-time physician and one older physician who limits his practice to office calls. For further information contact Mr. William Jarman, Mr. Harold Cleveland and Mr. Don Hart, all of Bicknell, Indiana.

Sullivan County—CARLISLE—population 900. Located nine miles from Sullivan, county seat, where hospital facilities are available. Hospital has been remodeled, new addition containing the latest in surgical equipment. There are only ten physicians in Sullivan County and two of these are over 80 years of age. For further information contact Dr. J. S. Brown, Carlisle, secretary of the Sullivan County Medical Society, or Mrs. Josephine Ridgway of Carlisle. ◄

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ABSTRACTS

BOOK REVIEWS

TEEN-AGE TYRANNY

Hechinger, Grace and Fred M. William Morrow and Company, New York, 1963. 243 pages; no illustrations. Price—$4.50.

To anyone who has ever cringed at the sight of the *Teen Star*, this book will be more fuel for the fire. The authors, who are well-qualified to write on this subject, explore various aspects of what is rapidly becoming a closed society of its own. "Society" may be too euphemistic a term since "cult" may be more applicable. It is not written, however, with a vindictive tone. It is a serious study of an arising situation that tends to separate teenagers from adult society. The various manifestations of this trend and the reasons leading to them are explored.

Specific topics such as pre-marital sexual relations, early marriages, smoking, drinking, and the impact of television and movies are all presented with illustrative examples. The chapter dealing with the teen-age shopping trend and its impact upon the market is written quite well and points out the sizable buying power that this segment of the population exerts.

Particularly striking is a report of the shopping list of the 12-year-old suburban girl which includes "water pistol, brassiere and permanent." Attention is drawn to one hospital that has developed a teen-age ward where rock and roll music is piped in constantly, a hamburger and hot dog stand has been supplied, and the main feature of the day is drag races in wheel chairs for the "teeners."

The usual rationalizations for teen-age behavior are presented; however, the authors are not willing to accept these as valid, although they do point out that teen-age behavior is in large part the responsibility of a lack of parental guidance. Strange phenomena are described in which the least desirable aspects of teen-age culture have actually been taken up by adults, the prime example of which is the twist. The problems of inadequate supervision and a soft approach to guidance in our school system is pointedly demonstrated.

The authors have done a creditable job in this attempt. The book is well documented with seven pages of bibliography; so it is more than mere speculation on their part, and their conclusions are well drawn. If a fault is to be found, it is that the book at times suffers from rambling composition and is at times repetitious. The binding is only fair; however, the book is otherwise technically well put together. The book can be recommended to a wide segment of the reading population, both teen-age and adult. It should be read

Recent reports suggest...insulin and sulfonylureas may accelerate lipogenesis, fat accumulation, weight gain; thus appear to aggravate obesity in diabetics[1-5] *...serum "insulin" levels are often elevated in obese diabetics*[2,3,6]*...DBI (phenformin HCl) reduces high blood sugars, lowers elevated "insulin" levels, tends to reduce body weight toward normal.*[1,3,7-9]

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with serious consideration and reflection rather than just for entertainment and amusement.

JACK W. HICKMAN, M.D.
Indianapolis

BIOLOGICAL INTERACTIONS IN NORMAL AND NEOPLASTIC GROWTH

Edited by Brennan, M. J., M.D. and Simpson, W. L., M.D.

Henry Ford International Symposium, Little, Brown & Co. 1961. $19.00. 812 pages lavishly illustrated with figures and tables.

The logarithmically accelerating accumulation of experimental data in almost all fields of scientific endeavor is, at present, smothering the average enquirer in a massive avalanche of seemingly poorly correlated facts.

We cannot be too far away from the day when the blinding *truth* will make the entire story coherent, logical—and simple. Until that happy day, we are compelled to have volumes exactly such as this one. More than a hundred most eminent experts have gathered to discuss everything (and I mean EVERYTHING) about a topic in which intelligent questions are being asked but really codifying answers are still being awaited. This beautifully printed, splendidly put together symposium tells the researcher the latest in the frontier of science outlined by the title.

The expert is led by the hand and told in great detail just what is *presently* known about the observed experimental facts relating to just how cancer deviates from the normal growth, both quantitatively and qualitatively. The very first chapter establishes the central thesis: the chromosomes of the fertilized ovum which will form the multicellular organism have already established a direction of development which will be modified by the exigencies of environmental chemistry, influence of distant groups of cells, vagaries of its own unfolding and also such external factors as radiation, viral infection, metabolic and endocrine aberrations and other decisively altering factors.

This book is a dated, interim must for the expert; it cannot be in any way recommended for the average general practitioner, casual reader or even the dabbling amateur fancying himself as being knowledgeable in this challenging field. I hope to live long enough to see a short summary giving the real facts that are still being skirted in this splendid symposium.

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

Abstracts From Various Literature, Prepared by AMA

CHROMOSOMAL MOSAICISM

The case of a 6½-year-old boy is reported, in whom mild mental retardation, poor expressive



DBI and DBI-TD (phenformin HCl),

administered to ketoacidosis-resistant diabetics requiring hypoglycemic therapy: **A.** act to reduce high blood sugar without increasing fat synthesis or weight gain as insulin and sulfonylureas tend to do. **B.** do not increase already elevated endogenous insulin levels; may, indeed, act to restore more normal insulin levels. **C.** favor reduction of weight towards normal.

Insulin is still the essential hypoglycemic agent for the ketoacidosis-prone diabetic. However, in the ketoacidosis-resistant obese diabetic phenformin appears to be the hypoglycemic of choice to help avoid weight gain or reduce adiposity, a factor tending to make control more difficult and to increase the likelihood of complications.

Summary: Indicated in stable adult diabetes, sulfonylurea failures and unstable diabetes. Gastrointestinal side effects occurring more often at higher dosage levels abate promptly upon dosage reduction or temporary withdrawal. Occasionally an insulin-dependent patient will show "starvation" ketosis (acetonuria without hyperglycemia) which must be differentiated from "insulin-lack" ketosis, and treated accordingly. Use with caution in severe liver disease. Not recommended without insulin in acute complications (acidosis, coma, infections, gangrene, surgery). Consult product brochure for full information.

Bibliography: 1. Williams, R. H.: Textbook of Endocrinology, Ed. 3, Saunders, Philadelphia, 1962, p. 610. 2. Gordon, E. S.: Metabolism 11:819, 1962. 3. Grodsky, G. M. et al.: Metabolism 12:278, 1963. 4. Sadow, H. S.: Metabolism 12:333, 1963. 5. West, K. M. and Tophoj, E.: Metabolism 10:689, 1961. 6. Yalow, R. S. and Berson, S. A.: Diabetes 9:254, 1960. 7. Weller, C. et al.: Scientific Exhibit, A.M.A., June 1962. 8. Weller, C. et al.: Metabolism 11:1134, 1962. 9. Radding, R. S. et al.: Metabolism 11:404, 1962.

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language performance, motor incoordination, and dysarthria were combined with absence of the patellae and other congenital malformations. Blood and skin cultures revealed that 22% of cells had a 46/XY and 70% had a 47/XY pattern. Karyotypes made from seven cells with 47 chromosomes showed that each had an extra chromosome which seemed to resemble a large acrocentric belonging to Group 13-15 (Group D). However, the possibility that the extra chromosome represents a structural chromosomal aberration, which might account for the mitigation of clinical symptoms of the trisomy D syndrome, could not be excluded. No cells with 47 chromosomes were found in the parents of the patient. In a normal brother three cells with 47 chromosomes were found, whereas a mentally retarded cousin had normal chromosomes.

Warkany, J., Rubinstein, J. H., Soukup, S. W., Curless, M. C.: Mental Retardation, Absence of Patellae, and Other Malformations with Chromosomal Mosaicism, *J. Pediat.* 61:803, (Dec.) 1962.

SOME ASPECTS OF PRIMARY HYPERPARATHYROIDISM

The observations reported were made by the authors in the course of the surgical treatment of 52 patients in whom hyperparathyroidism was diagnosed on the basis of clinical and biochemical studies. They emphasize the importance of a thorough knowledge of the anatomy of the parathyroids for a surgeon. At the "usual" thyroid operations he should not only look for the parathyroids, but should also identify the inferior thyroid artery and the recurrent nerve, for the lowest parathyroids generally lie against or behind these structures. The authors agree with the view expressed by Albright and Reifenstein that there is "no time like the first operation to uncover a small adenoma," for the mass of connective tissue that forms after an operation makes renewed exploration for a parathyroid adenoma very difficult. The authors list the following factors as being responsible for the difficulties encountered by the surgeon operating on a patient for hyperparathyroidism: (1) the small size of the parathyroids (30 to 50 mg); (2) their differing locations in neck and mediastinum; (3) the indefinite, varying numbers of parathyroids; (4) the possibility of the existence of more than one adenoma. In four of their patients, the authors observed two and in one three adenomas. In six of nine patients who underwent a second operation, parathyroid adenomas were found and removed, whereas in the other three this was not accomplished. It is difficult to arrive at a prognosis in patients with hyperparathyroidism, since the condition may sometimes continue for years without producing symptoms, whereas in other patients it is rapidly progressive.

Muller, H., Smeenk, D.: Some Aspects of Primary Hyperparathyroidism (Study of 52 Observed



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Cases): Treatment and Prognosis. *Ned. T. Geneesk* 106:2314 (Nov. 17), 1962.

USE OF GRISEOFULVIN WITHOUT FUNGUS DIAGNOSIS

From July, 1959, to September, 1961, griseofulvin was used in the treatment of fungus infections without previous microscopic examination of fungi. In a double-blind therapeutic experiment, it was possible to compare the effects of griseofulvin treatment with those of a placebo tablet. The patients were treated for 21 days. The daily dose was eight tablets, each containing 250 mg of griseofulvin (2 gm daily). It was possible to evaluate 89 patients who received griseofulvin tablets and 87 who received placebo tablets. There was no difference in therapeutic results between the griseofulvin-treated group and the group receiving the placebo. In both groups there was improvement in about 50% of the patients. The side effects, especially headache, were more frequent in the treated than in the placebo group.

Christiansen, J. V.: Use of Griseofulvin Without Fungus Diagnosis, *Ugeskr. Laeg.* 124:1875 (Dec. 21) 1962.

CLINICALLY UNSUSPECTED CARCINOMAS OF THE BREAST

The value of mammography, as a diagnostic aid in carcinoma of the breast, was studied in 571 patients who had sought medical advice because of questionable palpable masses, multiple doubtful biopsies, routine scouting examinations, or cancerophobia. Although the accuracy of the procedure cannot be entirely estimated because not all patients studied had biopsies, the fact that 15 unsuspected carcinomas were discovered is significant. Four of the unsuspected carcinomas were found among asymptomatic patients, five among patients who had a dominant breast lesion and in whom mammography revealed carcinoma in another segment on the same side, or on the opposite breast, and six among patients with palpable masses, but no evident dominant lesion. It is pointed out that mammography is of greatest value when the findings are definitely positive, and that a negative report does not rule out the presence of carcinoma. In five of the 28 patients with carcinoma in this series, the diagnosis based on mammographic findings was not accurate. The difficulty in such cases was the marked increase in the density of the breast, caused by fibrocystic disease or adenosis. The authors recommend that biopsy be performed in all cases of a dominant lesion and of adenosis and that mammography be added in order to increase the accuracy of diagnosis.

Martin, J. E., Keegan, J. M., Lemak, L. L., Yates, C. W.: Clinically Unsuspected Carcinomas of the Breast, *Amer. J. Roentgenol.* 88:1102 (Dec.) 1962. ◄



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Art, Hobby Show Planned For ISMA Indianapolis Meeting

Space will be provided at the 1963 annual meeting of the Indiana State Medical Association, Oct. 15-17, at Indianapolis, for a Physicians Art and Hobby Show.

Members of ISMA interested in exhibiting pieces and requiring any information regarding this can contact any one of the following:

Dr. Philip T. Holland
108 W. 7th Street
Bloomington

Dr. Charles P. Schneider
2211 W. Franklin St.
Evansville 12

Dr. Truman E. Caylor
303 S. Main St.
Bluffton

Dr. Frank H. Coble
51 S. Eighth Street
Richmond

Dr. Lall G. Montgomery
Ball Memorial Hospital
Muncie

ISMA Headquarters
3935 N. Meridian
Indianapolis 8

It will be the responsibility of each physician to see that his work gets to the exhibition at the Murat Temple. Final arrangements will be taken care of by Dr. Holland and his committee.

The ISMA will provide suitable display facilities, but each physician is responsible for transportation costs and any other such expense involved in entering his exhibit.

Application for Space in Art and Hobby Show Exhibit

Mail to:

Dr. Philip T. Holland
108 W. 7th Street
Bloomington, Indiana

Name_____

Address_____ City_____

Type and number of pieces to be displayed: Photography_____

Sculpture_____

Crafts_____

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Estimated amount of space required—lineal or square feet_____

Other information_____

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Independent Business Proprietors Show Opposition to Medicare

Opposition among the nation's independent business proprietors to the principle of Medicare financed through Social Security is stiffening, according to the most recent poll of the membership of the National Federation of Independent Business. In balloting conducted in all 50 states in April, 83% of the small businessmen expressed opposition, and 15% favored the King-Anderson bill now before Congress, with 2% holding no opinion, according to C. Wilson Harder, president of the federation.

In a vote taken just one year earlier on the same issue, Harder points out, only 77% of the nation's independent entrepreneurs were opposed, with 21% in favor, and 2% undecided. In August, 1961 the nationwide voting on the same issue showed only 73% opposed, 24% in favor, and at that time 3% were undecided.

"It is significant," Mr. Harder stated, "that opposition is growing to the medicare principle. The independent business proprietor's increasing opposition appears to be based on two major points. One is that it is feared this would start a trend toward Socialized Medicine. The other is that there is a growing belief that constant increases in paycheck deductions is a substantial factor in promoting labor trouble.

Last June, he said, the nation's independent businessmen voted by an 88% majority in favor of a proposed constitutional amendment which would impose a limit on the amount that can ever be voted in Social Security taxes.

New VA Medical Director

Major General Joseph H. McNinch, Medical Corps, U. S. Army (Retired) has succeeded Dr. W. S. Middleton as Chief Medical Director of the Veterans Administration. General McNinch was born and received his early education in Indianapolis.

He received his MD degree from Ohio State University and has been in the Army since 1930. He was assigned most recently as Chief Surgeon for the U. S. Army in Europe.

Anderson Student Wins First Prize in 1963 AAPS Essay Contest

Miss Marilyn Johnson of Anderson, Indiana, 18-year-old student of Pendleton High School, has won the first prize of $1,000 in the national 1963 Essay Contest conducted by the Association of American Physicians and Surgeons.

While announcing the names of 14 prize winners in the 1963 contest the AAPS also announced the contest for next year. High school students except sons and daughters of physicians are eligible. The contest is conducted on a county, state and national basis with prizes at each level.

Dr. Pierce Named Diplomate

Dr. Emmett C. Pierce, Indianapolis, recently became a diplomate of the American Board of Pathology.

AMA ESTABLISHES NATIONAL COUNCIL FOR NURSING HOME ACCREDITATION

A National Council for the Accreditation of Nursing Homes has been organized by the AMA and the American Nursing Home Association to carry out a nationwide program to promote high standards among nursing homes. The board of directors is composed of five physicians and four owners and operators of nursing homes. The

Continued

Abscess
Acne
Amebiasis, acute, intestinal
Anthrax
Bacillary dysentery
Bacteremia
Bartonellosis
Bronchitis, acute
Bronchopulmonary infection
Brucellosis, acute
(IN COMBINATION WITH OTHER ANTIMICROBIAL AGENTS)
Chancroid
Diphtheria
(IN CONJUNCTION WITH ANTITOXIN AND ROUTINE ESTABLISHED THERAPY)
Endocarditis, subacute, bacterial
Genitourinary infection
Gonorrhea
Granuloma inguinale (DONOVANOSIS)
Infections associated with pancreatic fibrosis
Listeriosis
Lymphogranuloma venereum
Meningitis, purulent
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(EXTERNA OR MEDIA)
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(WITH OR WITHOUT BACTEREMIA)
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PNEUMOCOCCI
GONOCOCCI
SHIGELLAE
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and, in particular, with certain species of tetracycline-sensitive microorganisms such as the following:
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Surgical and dental preoperative and postoperative prophylaxis
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(WHERE THE PATIENT IS PENICILLIN-SENSITIVE)
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Agammaglobulinemia or hypogammaglobulinemia and recurring infections
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SIDE EFFECTS (infrequent and usually mild): glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis, dermatitis, overgrowth of nonsusceptible organisms. CONTRAINDICATIONS: None, but the following precautions should be observed: high-calcium-content foods or drugs should not be taken for at least one-half hour after each dose; avoid excessive accumulation of antibiotics by reducing dosage in patients with impaired renal function; consider possibility of discoloration of teeth during tooth development (late pregnancy, infancy or early childhood).
CAPSULES—250 mg. and 100 mg.; SYRUP; PEDIATRIC DROPS.

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Continued

council will have its headquarters in Chicago.

A full-time executive director is to be chosen. Nursing homes are becoming more important in total health care due to the rising population of older citizens. The number of skilled nursing homes increased from 7,000 in 1954 to 9,700 in 1961, with a total bed capacity increase from 180,000 to 338,700.

Dr. Baxter Elected to Post

Dr. Neal E. Baxter, Bloomington, was elected First Vice-President of the Aerospace Medical Association at its recent Annual Scientific Meeting in Los Angeles.

Third Modern Medical Clinic In Indiana Dedicated at Georgetown

The third modern medical clinic to be built in Indiana under the Medical Assistance Program of the American Medical Association and Sears-Roebuck Foundation was dedicated on June 16, in Georgetown.

The $40,000 clinic located on Summers Road will serve as the medical center for Georgetown and a surrounding area population estimated at 3,000.

Dr. Paul E. Youngs of Petersburg, Ind., who has completed his residency at Norton Hospital in Louisville, Ky., is establishing his practice in the clinic.

Built by the Georgetown Citizen's Committee, a not-for-profit organization, the clinic was erected from funds raised from 280 individuals and 20 business organizations in the Georgetown-New Albany area. Construction of the clinic, which was undertaken as an incentive for doctors to establish their practices in the community, began in June 1962, and was completed last October.

Other Indiana communities which have obtained clinics and doctors by participating in the Medical Assistance Program are Holland and Spencer.

ALFRAN HOME
WARSAW, IND.

We can adequately care for your convalescents and long term care patients, requiring intensive nursing care, any age. R.N.'s around the clock, L.P.N.'s also on duty. Necessary therapy, diets, intravenous, oxygen. All doctors welcome. Professional care in homelike atmosphere for those who demand and appreciate the best.

ALFRAN NURSING HOME
2501 E. Center Warsaw, Ind.
267-6611 Area 219

POST-DOCTORAL FELLOWSHIPS IN ALLERGY OFFERED TO GRADUATES

The Allergy Foundation of America announces the availability of four post-doctoral fellowships in research and clinical allergy.

These fellowships, which are for two years, were established to prepare a group of promising young physicians for research, hospital and university careers in allergy.

Candidates must be graduates of approved medical schools and must have completed at least two years of hospital internship training. They are expected to divide their time between research work and clinical training in allergy as arranged with the preceptor.

Requests for information and/or applications should be sent directly to the Secretary of the Scientific and Educational Council, Allergy Foundation of America, 801 Second Ave., New York 17.

Two Indiana Physicians Give Postgrad Course in Nasal Surgery

Two Indiana surgeons, Dr. Walter J. Aagesen of Anderson and Dr. Carl B. Sputh of Indianapolis, were among 35 American surgeons who presented a postgraduate course in nasal surgery at the University of Leiden, the Netherlands, in July. The course was taught at the Boerhaave Center, which honors Dr. Hermann Boerhaave (1668-1738) who was a pioneer in patient bedside instruction.

Dr. Boerhaave was host to many traveling American doctors and is credited with popularizing bedside instruction which since that time has become the standard of good medical education throughout the civilized world. The American surgeons who participate in the postgraduate course attribute their participation to a desire to repay the longstanding obligation to Dr.

Continued

Question:

"What is a tranquilaxant?"

Answer:

"A drug that is both a tranquilizer and a muscle relaxant."

TRANCOPAL®
brand of
chlormezanone
is a tranquilaxant

As a tranquilizer, TRANCOPAL (chlormezanone/Winthrop) "is effective in the symptomatic treatment of anxiety."[1] Its tranquilizing properties are similar to those of other mild tranquilizers.[1] Furthermore, it relieves tension of both mind and muscle without interfering with normal activity or alertness.

The muscle relaxant properties[2] of this drug provide an extra dimension of effectiveness...relaxing the spasm which so frequently accompanies psychogenic disorders. Hence, the total therapeutic effect of TRANCOPAL (chlormezanone/Winthrop)—a true "tranquilaxant"—is to produce a relaxed mind in a relaxed body.

Unsurpassed Tolerance: Less than 3 per cent of patients develop side effects with TRANCOPAL (chlormezanone/Winthrop), such as occasional drowsiness, dizziness, flushing, nausea, depression, weakness and drug rash. If severe, medication should be discontinued. In most patients, however, side effects are minor and do not necessitate interruption of treatment. There are no known contraindications.

Available: 200 mg. Caplets® (green colored, scored), 100 mg. Caplets (peach colored, scored), each in bottles of 100.

Dosage: Adults, 1 Caplet (200 mg.) three or four times daily; in some patients 100 mg. three or four times daily suffices. Children (5 to 12 years), from 50 to 100 mg. three or four times daily.

Winthrop
WINTHROP LABORATORIES
New York 18, N.Y.

References: 1. A.M.A. Council on Drugs: J.A.M.A. 183:469 (Feb. 9) 1963. 2. Gruenberg, F.: Curr. Ther. Res. 2:1 (Jan.) 1960.

1783M

Boerhaave for his contributions to American medical education.

Dr. Poncher Wins Fellowship

Dr. John R. Poncher of Evansville has been announced as one of the 15 physicians to be awarded a $4800 residency fellowship in pediatrics by Wyeth Laboratories. Recipients of the fellowships may acquire two years' training in any accredited residency in pediatrics.

Ten Indiana Physicians Certified By American Ob-Gyn Board

Ten Indiana physicians were certified by the American Board of Obstetrics and Gynecology on May 3, 1963. Included in the 394 diplomates from United States and Canada were Drs. Howard Brenner of Munster, James Brillhart, Carl A. Freed and Joseph Thompson of Indianapolis, Otto Forrest of South Bend, Edward Johnson of Terre Haute, Edwin Morey of Fort Wayne, Alfred Rhodes of Lawrenceburg, Hugh A. Stallings of Evansville and Gert Voss of Muncie.

Northern Indiana Psychiatric Society Names New 1963 Officers

Following are the new officers of the Northern Indiana Psychiatric Society for the year 1963-1964: Theodore A. Hill, M.D., president; August Dian, M.D., president-elect; Lester D. Borough, M.D., vice-president; Hans Myer, M.D., secretary; Richard Shriner, M.D., treasurer and Grant E. Metcalfe, M.D., delegate.

W. B. SAUNDERS COMPANY features the following new editions in their full page advertisement appearing elsewhere in this issue:

BEESON and McDERMOTT — *Cecil-Loeb Textbook of Medicine*
The New (11th) Edition of a world-famous text, with contributions by 173 authorities and details of over 800 diseases.

GRAHAM—*The Cytologic Diagnosis of Cancer*
An up-to-date revision explaining what can be learned from suspected smears through accurate laboratory methods.

MAYO CLINC—*Clinical Examinations in Neurology*
A famous medical center's working blueprint to effective neurologic examination.

FORTY-THREE INDIANAPOLIS DOCTORS PROMOTED IN RANK ON I.U. FACULTY

Forty-three Indianapolis doctors have been promoted in rank as part-time faculty members in the Indiana University School of Medicine.

In the School of Medicine the following promotions were made:

From assistant professor to associate professor—Richard W. Dyke, Richard S. Griffith and Ralph C. Wilmore, all in clinical medicine.

Instructor to associate professor—James H. Gosman, dermatology.

Instructor to assistant professor—Mrs. Mary E. Dallas, anesthesiology; Albert Lepp, biochemistry; Sheldon Reiser, biochemistry and medicine; Edward F. Steinmetz and Sheldon H. Steiner, clinical medicine; John R. Scott, pediatrics; Wesley A. Kissell, Ott B. McAtee, Ross Overley, David L. Phillips and John B. Scofield, psychiatry, and George C. Kaiser and Robert D. King, surgery.

Associate to assistant professor—Paul G. Dintaman, Jack W. Hickman and Alfred T. Symmes, clinical medicine; Charles F. Gillespie, obstetrics and gynecology; Stephen J. Alexander, opthalmology; Mrs. Helen Beall Barnes, Wendell E. Brown and Robert M. Butler, pediatrics, and Harvey G. Narrol, psychiatry.

Assistant to associate professor—Boynton H. Booth and Robert E. Jenkins, dermatology.

Assistant to assistant professor—Paul V. Chivington, dermatology.

Assistant to instructor—John F. Spahr, Jr. and John E. Mackey, obstetrics and gynecology.

Assistant to associate—Henry R. Black, John O. Butler, Edward R. Gabovitch, Erwin Permer and Anthony S. Ridolfo, clinical medicine; Robert W. Harger, ophthalmology; Frederick H. Evans and Ray D. Foster, otorhinolaryngology, and Fred R. Dallas, urology. ◄

FUTURE MEETINGS, SEMINARS, COURSES

World Medical Association Meets October 13 to 19 in New York City

The next annual meeting of the World Medical Association will be held in New York City at the Commodore Hotel, October 13 to 19.

The AMA will be the host. President Edward R. Annis has been nominated as President-elect of WMA.

ISMA Invited to Surgical Congress November 5-13 in Honolulu

Members of ISMA are invited to attend the Ninth Congress of the Pan-Pacific Surgical Association to be held in Honolulu from November 5 through 13.

Separate and concurrent meetings will be held in general surgery, obstetrics-gynecology, thoracic-cardiovascular, otolaryngology, ophthalmology, urology, orthopedics, plastic surgery and neurosurgery. Integrated into these sections will be papers on radiology and anesthesiology. Afternoon and evenings are scheduled for social activities and weekends are free for sightseeing.

Daily flights may be made from California and the Lurline will sail from San Francisco to arrive just prior to the Congress. More details may be obtained by addressing the association at Alexander Young Bldg., Honolulu, 13.

Public Health Service Will Conduct Chemical, Biological Defense Courses

The Public Health Service will conduct multiple 6-day training courses in chemical and biological defense at Fort McClellan, Alabama beginning on August 19, and repeating on October 14, December 9, February 10, 1964 and April 6, 1964. There is no tuition fee. Security clearance is not required.

The courses are directed to civilians and will be of value to all persons whose responsibilities require knowledge of the medical aspects of civil defense. Requests for enrollment forms and further information should be addressed to Deputy Chief, Training Branch, Division of Health Mobilization, Public Health Service, Washington, 25, D. C.

Hahnemann Medical College Lists "Aging of the Lung" Postgrad Course

Hahnemann Medical College and Hospital is offering its 10th annual symposium November 18-20 at the Sheraton Hotel, Philadelphia. Topic of this year's course will be "Aging of the Lung: Perspectives."

The primary purpose of this meeting is to consider recent developments in the biochemistry, morphology and physiology of aging as it relates to the lung.

Further information may be obtained from the College, 230 N. Broad St., Philadelphia 2.

American Rhinologic Society Picks November 23 for Annual Meeting

The American Rhinologic Society will hold its ninth annual meeting in Chicago, on November 23, at the Illinois Masonic Hospital.

There will be a two-day surgical seminar preceding the meeting. Further details may be obtained from Dr. George Drumheller, 1515 Pacific Ave., Everett, Washington.

GASTROENTEROLOGY POSTGRAD COURSE OFFERED BY CLEVELAND CLINIC

A postgraduate course in Gastroenterology on Diseases of the Small Intestine will be presented at the Cleveland Clinic Educational Foundation, October 2nd and 3rd. Drs. H. Marvin Pollard and G. Gordon McHardy will be the guest speakers.

Further information can be obtained by writing to Charles H. Brown, M.D., Cleveland Clinic, 2020 E. 93rd, Cleveland 6.

Postgraduate Course in Allergy October 14-18 in Pittsburgh

The Sections on Allergy of the Veterans and Montefiore Hospitals, Pittsburgh, Penn-

sylvania, will present an intensive five day course in allergy, October 14-18.

This course is intended to orient the internist and the general physician in the various phases of allergic diseases. This course should also be of interest to the dermatologist, the rhinologist, and the pediatrician interested in fundamental concepts involved in the care of allergic patients.

The registration fee is $85.00. Address all inquiries to: Leo H. Criep, M.D., Central Allergy Laboratory, Veterans Administration Hospital, University Dr., Pittsburgh 40.

American Heart Association Annual Scientific Session Set for October

The American Heart Association will conduct its 36th Annual Scientific Session at the Biltmore Hotel in Los Angeles from October 25 through October 27.

The program will include an all-day session on stroke, panels on anticoagulants and shock therapy for arrhythmias. Registration forms and hotel reservation forms may be obtained by addressing the association at 44 E. 23rd St., New York, 10.

Orthopedics Symposium Set for October 17-19 in St. Petersburg

The Mound Park Hospital Foundation announces a postgraduate symposium of orthopedics, trauma, minor surgery and office orthopedics October 17-19 in St. Petersburg, Fla.

Eighteen hours of Category 1 credit will be allowed by the American Academy of General Practice. Further information may be obtained by writing to Orthopedics, c/o the Foundation, 701 Sixth Street South, St. Petersburg. ◄





In Sprains, Strains and Muscle Spasm, 'Soma' Compound

numbs the pain...not the patient

A potent analgesic and a superior muscle relaxant

1. A sprain or fracture is not a big clinical problem—but it does hurt. And if there is housework to do and kids to mind, the patient needs something to numb the pain.

2. A.P.C. compounds have limited usefulness; and the patient can buy them without your prescription. Unfortunately, most of them are too mild to be effective for sprains—and more potent products too often make the patient feel 'dopey'.

3. 'Soma' Compound is ideal in these cases. Since it contains both 'Soma' (carisoprodol) and acetophenetidin it is both a potent analgesic and a superior muscle relaxant; it also contains caffeine to offset any drowsiness *("numbs the pain... not the patient")*.

4. Why not try 'Soma' Compound? Dosage is 1 or 2 tablets q.i.d. For more severe pain, try 'Soma' Compound + Codeine. Dosage: 1 or 2 tablets q.i.d.

5. Hypersensitivity to carisoprodol may occur rarely. Codeine may produce addiction, nausea, vomiting, constipation or miosis.

Soma® Compound

carisoprodol 200 mg., acetophenetidin 160 mg., caffeine 32 mg.

Soma® Compound + Codeine

carisoprodol 200 mg., acetophenetidin 160 mg., caffeine 32 mg., codeine phosphate 16 mg. (Warning—may be habit forming.)

®WALLACE LABORATORIES / *Cranbury, N.J.*

CSO-9193

INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—June 1963

Disease	June 1963	May 1963	Apr. 1963	June 1962	June 1961
Animal Bites	1036	1029	890	948	1074
Chickenpox	244	758	658	195	418
Conjunctivitis	46	77	87	69	92
Diphtheria	0	0	0	0	0
Dysentery, Unspecified	70	111	60	6	8
Gonorrhea	245	233	228	Not Available	
Impetigo	63	75	64	85	86
Infectious Hepatitis	40	81	52	64	186
Infectious Mononucleosis	21	31	23	15	14
Influenza	88	240	959	182	257
Measles (Rubeola-Rubella)	377	1556	1176	618	861
Meningitis, Meningococcal	5	3	3	2	3
Meningitis, Other	4	12	9	2	7
Mumps	244	519	370	132	710
Pertussis	29	29	13	47	2
Pneumonia	85	154	197	106	119
Poliomyelitis	1	1	0	0	0
Streptococcal Infections	241	565	582	248	392
Syphilis					
Primary and Secondary	7	6	5	Not Available	
All Other Syphilis	103	111	100	Not Available	
Tinea Capitis	2	8	2	5	21
Tuberculosis (Active)	107	193	161	93	Not Available

WABASH VALLEY HOSPITAL

"On the Banks of the Wabash"



A hospital for the treatment of Neuro Psychiatric Disorders
Open Psychiatric and consulting staff

DONALD R. KINZER, Administrator

Lafayette, Indiana Phone Ri. 3-3841

Annual Meeting Dates of Professional Medical and Allied Organizations

INDIANA STATE SOCIETY OF ANESTHESIOLOGISTS
Date May, 1964
Place Indianapolis

BONE AND JOINT CLUB
Date October 16
Place The Athenaeum, Indianapolis

INDIANA ACADEMY OF GENERAL PRACTICE
Date March 11-12, 1964
Place Murat Temple, Indianapolis

INDIANA NEUROPSYCHIATRIC ASSOCIATION
Date Second Wednesday of every month, October through May
Place The Athenaeum, Indianapolis

INDIANA OBSTETRICAL AND GYNECOLOGICAL SOCIETY
Fall Meeting
Date November 13
Place Marott Hotel
Annual Meeting
Date January 15, 1964
Place Marott Hotel

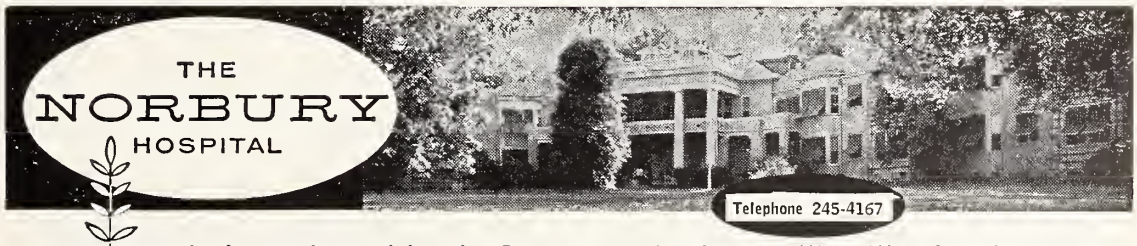
INDIANA ASSOCIATION OF PATHOLOGISTS
Date Dec. 1, 1963
Place Methodist Hospital
Fall Scientific Meeting
Date Sept. 21-22, 1963
Place I.U. Medical Center
Annual Seminar
Date May 17, 1964
Place Veterans Administration Hospital

INDIANA CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS
Date October
Place Indianapolis

INDIANA PHARMACEUTICAL ASSOCIATION
Mid-Year Meeting
Date January, 1964
Place Indianapolis

INDIANA HOSPITAL ASSOCIATION
Date October 23-25
Place French Lick, Indiana

CENTRAL DISTRICT, INDIANA CHAPTER, AMERICAN PHYSICAL THERAPY ASSOCIATION
Date September
Place To be announced



a Private Psychiatric Center at Jacksonville, Illinois, *since 1901*

Complete psychiatric treatment in an environment for cure. A 60 bed hospital with the most modern diagnostic and therapeutic equipment for the treatment of nervous and mental disorders.

LICENSED: Illinois Department of Mental Health

MEMBER: Illinois Medical Service (Blue Cross-Blue Shield)

Deaths

Medicine Loses Enthusiastic, Loyal Colleague In Passing Of Dr. Harry R. Stimson, Former ISMA President

Dr. Harry R. Stimson, former president of ISMA and long-time active member of the association, died June 30 in Gary.

Dr. Stimson, 61, practicing physician in Gary since 1936, was one of the association's most active officers and workers. He was an ISMA delegate in 1948, 1950-53 and again from 1954 through 1960. He served on the medical care insurance, public relations, review for claims on Public Law 569, student loan, grievance and executive committees and the Commission on Governmental Medical Services.



A native of Marengo, Dr. Stimson was graduated from Rush Medical College in Chicago in 1933. He interned first at Roseland Community Hospital near Chicago and later at Wichita, Kans.

After practicing a year at Genoa, Neb., he went to Gary in 1936 and had practiced there since. Dr. Stimson was president of the Methodist Hospital staff in 1957 and since 1958 had been a member of the Indiana 10th District Blue Shield board of directors.

Last April he was elected to the executive committee of Indiana Blue Shield. A member and past president of the Lake County Medical Society, Dr. Stimson was the first Gary doctor to become president of ISMA. He served in 1961-62.

James H. Bivin, M.D.

Dr. James H. Bivin, Mooresville physician and widely-known golfer, died May 29 of a heart attack at the Country Club of Indianapolis. He was 41 years old.

Dr. Bivin had played in the Indiana Open and other major golf tournaments. He was a graduate of Butler University and of the Indiana School of Medicine in 1950. A member of the Morgan County Medical Society, Dr. Bivin had lived in Mooresville 10 years.

J. H. Clevenger, M.D.

Dr. Joseph H. Clevenger, 61, noted Muncie physician and surgeon, died June 25 at Ball Memorial Hospital.

A native of Mt. Erie, Ill., Dr. Clevenger was graduated from Northwestern University Medical School and had practiced medicine in Muncie since 1931. Dr. Clevenger was a member and past director of the Delaware-Blackford Medical Society and a member of the Muncie Academy of Medicine and the Ball Hospital staff. He was serving as executive committee chairman of the hospital staff at the time of his death.

John How, M.D.

Dr. John T. How, a physician in the St. Joseph County town of Lakeville for more than 50 years, died June 26 in South Bend's Memorial Hospital. He was 89.

Dr. How, who was graduated from the Medical College of Chicago in 1897, practiced at Plymouth and Bremen before moving to Lakeville in 1902. A member of the St. Joseph County Medical Society, Dr. How was also a Senior Member and member of the ISMA 50-Year Club.

Robert D. Howell, M.D.

Dr. Robert D. Howell, 57, former Indiana University Medical School faculty member, died June 2 at his home.

On the attending staffs of Methodist, St. Vincent's, General and the I. U. Medical

Center hospitals, Dr. Howell was president of the Methodist Hospital staff in 1952. He was graduated from I. U. School of Medicine in 1933, had headed the urological sections at Methodist and General and was a former associate professor of urology at I. U.

Dr. Howell was one of the original members of the Hospital Medical Development Board and had served seven years on the medical staff of the Joint Liaison Committee with the board of trustees at Methodist. He was a member of the Marion County Medical Society and on the ISMA Commission on Inter-Professional Relations.

Frederick E. Jackson, M.D.

Dr. Frederick E. Jackson, former teacher, newspaper reporter and author, died June 18 in General Hospital.

Dr. Jackson, 84, had been a physician since 1910. Appointed in 1926 to the Indianapolis Board of Health and Charities (now the Health and Hospital Corp. of Marion County), he had served as its president three years.

Born near Bedford, Dr. Jackson taught elementary school there and later joined the Pueblo (Colo.) *Chieftain*, where he worked with the late Damon Runyon. Dr. Jackson was the author of three books and was a member of the Marion County Medical Society. He was made a member of the ISMA 50-Year Club in 1960.

John B. McClellan, M.D.

Dr. John B. McClellan, 51-year-old physician who had practiced in Muncie, Goodland and Lafayette, died June 25 in Ball Memorial Hospital.

Dr. McClellan, a 1943 graduate of the I. U. School of Medicine, was a part-time physician at Ball State. He had been a member of the staff of the Ball State College Health Service for several months until he resigned earlier this year due to illness. He was a member of the Delaware-Blackford County Medical Society.

Maurice G. Murphy, M.D.

Dr. Maurice G. Murphy, died June 7 in Chicago where he had gone to receive a pin in recognition of his 50 years of service as a physician in Morgantown for the Illinois Central Railroad. He was 77 and a life resident of Morgan County.

A member of the ISMA 50-Year Club, Dr. Murphy was on the staff at Morgan County Hospital, was an officer in the Morgan County Tuberculosis Association, and was a member of the Morgan County Medical Society.

Alfonso Ramos, M.D.

Dr. Alfonso Ramos, 46, member of the Lake County Medical Society, died July 8 in Chicago.

Dr. Ramos was a general practitioner specializing in pulmonary diseases. He was graduated from the Universisty of St. Tomas in the Philippines in 1942.

W. R. Taylor, M.D.

Dr. William Reid Taylor, Wayne county health officer for 25 years and also Richmond health officer since 1954, died June 13 at his home.

The 72-year-old general practitioner was a native of New Washington, Ind., and a graduate of the University of Pennsylvania Medical School in 1917. A member of the Wayne-Union County Medical Society, Dr. Taylor had served as both city and county health officer since 1954. He moved to Richmond in 1922 and was a former president of the Indiana Health Officers Association.

George L. Venable, M.D.

Dr. George L. Venable, 71-year-old North Manchester general practitioner, died June 6.

Dr. Venable was a graduate of the Rush Medical College in 1917, a member of the Wabash County Medical Society and a Senior Member of ISMA.

A. A. Wade, M.D.

Dr. Alfred Ainsworth Wade, 80, died May 24 in the LaGrange County Hospital, LaGrange, after a year's illness.

Dr. Wade was graduated from the Detroit College of Medicine (now Wayne University) in 1909 and began practice with his brother, Dr. Frank C. Wade, in Howe. He continued to practice after his brother's death in 1940 until ill health forced retirement. Dr. Wade was the first chief of staff at the LaGrange Hospital. He was a member of the LaGrange County Medical Society and ISMA's 50-Year-Club. ◄

County, District News

Clinton

Dr. Williams, a hospital radiologist, discussed mammograms with the 11 members of the Clinton County Medical Society present at the May 28 meeting.

Grant

Field Secretary Howard Grindstaff showed the Annis film "Operation Hometown" before the June 25 meeting of the Grant County Medical Society. There were 28 members present.

Montgomery

The Montgomery County Medical Society met June 20 to hear Mrs. Randolph discuss physical therapy. Sixteen members attended.

Newton

Dr. John Parker, Goodland, has been named president of the Newton County Medical Society. Dr. Arthur Schoonveld, Brook, is the new secretary-treasurer.

St. Joseph

Dr. W. Robert Orr, has been elected president of the St. Joseph County Medical Society. Other newly elected officers include Drs. Herbert A. Schiller, president-elect and Josephine F. Murphy, secretary-treasurer.

Washington

The Washington County Medical Society heard Field Secretary Robert Amick discuss the actions of the Indiana General Assembly, the sales tax and actions in Congress at its June 11 meeting. There were 11 members present. ◄

SCIENTIFIC EXHIBIT APPLICATION FORM

Committee on Scientific Exhibits
Indiana State Medical Association
3935 N. Meridian Street
Indianapolis 8, Indiana

Please send me an application form for a Scientific Exhibit at the ISMA Annual Convention, October 15-17, 1963, Murat Temple, Indianapolis, Indiana.

I propose to exhibit_____

Name_____

Address_____

City_____

State_____



most likely will...with Jefron!

when increased dosage or administration over long periods may be necessary to replenish tissue stores.

And Jefron is safer to have in the home. Even though Jefron (polyferose) contains approximately 45% iron (far more than the amount present in ferrous sulfate) controlled toxicity studies in experimental animals have shown that Jefron is significantly less toxic than such iron compounds as ferrous sulfate, ferrous gluconate, ferrous fumarate, ferroglycine sulfate complex and ferric choline citrate.(3)

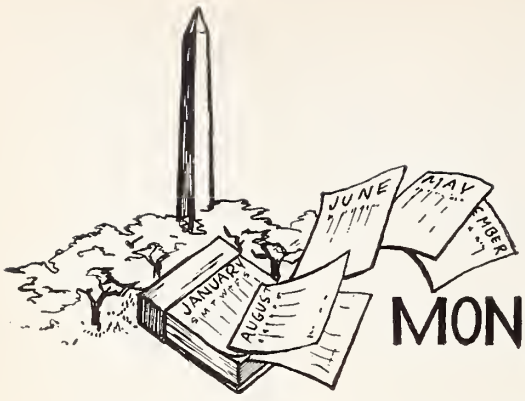
(1) Hoffman, E. P.; and Wilson, W. L.: A New Iron Carbohydrate Complex: Hematopoietic Effect and a Double-Blind Tolerance Study. Current Therapeutic Research, 3:387 (Sept.) 1961.

(2) Litchfield, H. R.; and Halperin, J.: A Clinical Study of the Use of a New Iron-Carbohydrate Complex. Medical Times, 89:1187 (Nov.) 1961.

(3) Weaver, L. C.; Gardier, R. W.; Robinson, V. B.; and Bunde, C. A.: Comparative Toxicology of Iron Compounds, Am. J. Med. Sci., 241:296 (Mar.) 1961.

Jefron PM

PITMAN-MOORE COMPANY, DIVISION OF THE DOW CHEMICAL COMPANY, INDIANAPOLIS 6, INDIANA



This summary of what is happening in Washington is prepared by A.M.A.'s Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D. C.—The Food and Drug Administration, acting on the advice of a committee of medical experts, gave the go-ahead for continued use of the oral contraceptive Enovid. However, the agency urged certain cautions in its use. Continued use only on physician's prescription was recommended. There is not enough evidence available now to show any relationship between consumption of Enovid and the occurrence of certain circulatory disorders, mainly thrombophlebitis and pulmonary embolism, according to the advisory committee.

However, FDA requested the manufacturer, G. D. Searle & Co., to advise physicians on the labeling of certain contraindications and of an apparent hazard in women over 35. Principal contraindications for use of Enovid as a contraceptive were listed as: 1) certain cancers; 2) liver disfunctions or diseases; 3) patients with a history of thrombophlebitis or pulmonary embolism. Enovid, used by some two million American women, was recommended only for short-term use (2-4 years), and primarily where pregnancy is contraindicated.

The advisory committee, formed five months ago, said statistical evaluation indicates that there is an apparent hazard from the consumption of Enovid by women 35 years of age or over. FDA said this apparent hazard must be weighed by the physician against the demonstrated hazard of pregnancy in determining whether to administer the drug to women of that age group.

The committee found need for additional studies regarding the possible effects of Enovid. Such studies are now under way and others will be undertaken.

The advisory committee was headed by Irving S. Wright, M.D., New York, N.Y. Copies of the report are available upon request to Division of Public Information, Food and Drug Administration, Washington 25, D.C.

KREBIOZEN DEVELOPER QUESTIONED AGAIN

The federal government sharply questioned the actions of the developer of krebiozen in a brief filed in Chicago Federal District Court. The brief was the government's answer to charges by Dr. Stevan Durovic, discoverer of krebiozen, that he was being harassed by Federal agents.

The government has charged that Durovic resisted and hampered its investigation of the alleged anti-cancer product, which has been banned from interstate commerce.

The government said Durovic in 1950 bought more than 1 million

Continued



STARTING TOMORROW MORNING this capsule can help one of your overweight patients do without her favorite (fattening) foods at meals—and during all the hours in between.

Dexamyl® Spansule®

Trademark — brand of sustained release capsules

Each No. 2 capsule contains 15 mg. of Dexedrine® (brand of dextro amphetamine sulfate) and 1½ gr. of amobarbital, derivative of barbituric acid [Warning, may be habit forming]. Each No. 1 capsule contains 10 mg. of Dexedrine (brand of dextro amphetamine sulfate) and 1 gr. of amobarbital [Warning, may be habit forming].

The active ingredients of the 'Spansule' capsule are so prepared that a therapeutic dose is released promptly and the remaining medication, released gradually and without interruption, sustains the effect for 10 to 12 hours.

INDICATIONS: (1) For control of appetite in overweight; (2) for mood elevation in depressive states.

USUAL DOSAGE: One 'Dexamyl' *Spansule* capsule taken in the morning.

SIDE EFFECTS: Insomnia, excitability and increased motor activity are infrequent and ordinarily mild.

CAUTIONS: Use with caution in patients hypersensitive to sympathomimetics or barbiturates and in coronary or cardiovascular disease or severe hypertension. Excessive use of the amphetamines by unstable individuals may result in a psychological dependence; in these rare instances withdrawal of medication is recommended. It is generally recognized that in pregnant patients all medications should be used cautiously, especially in the first trimester.

SUPPLIED: Bottles of 50 capsules.

Smith Kline & French Laboratories SK&F *Prescribing information Jan. 1963*

ampules. This was five times the amount of ampules he needed to handle the krebiozen powder he had brought to the United States from Argentina, the brief said.

Durovic has said he discovered the excess ampules were defective and destroyed them last May.

The government brief said "it may be that a half million ampules were destroyed on May 15, 1963. It may be that Durovic purchased enough mineral oil in 1950 to fill more than a million ampules with krebiozen solution, but poured all of the excess over that needed to fill 200,000 ampules down the drain.

"It may be. But there are strong reasons to doubt it. And this is why the investigation is called for most urgently."

The brief said that although Krebiozen has been sold for $9 an ampule, the cost per ampule is about 8 cents.

PMA OBJECTS TO FDA RULES

The Pharmaceutical Manufacturers Association and 44 U.S. drug producers filed official objections to "invalid" proposed regulations over drug advertising. The industry asserted that rules issued by the Food and Drug Administration go beyond the law and the intent of Congress.

One regulation subjects virtually all drug advertisements in professional journals to possible federal pre-publication censorship. The petition addressed to the FDA states that this "disregards the statutory command."

Also, according to the industry, FDA has gone beyond powers granted by Congress by trying to specify how prescription drug advertisements should be designed and written and where certain information should be placed. The law requires such advertisements to carry information in "brief summary" relating to side effects, contraindications and effectiveness, but it does not give the Department of Health, Education and Welfare power over the entire layout, typography and content, the industry asserted.

"The main difficulty is that the Food and Drug Administration, in these regulations, treats advertising as labeling," Dr. Austin Smith, president of the PMA, said. "Congress made a clear distinction between the two."

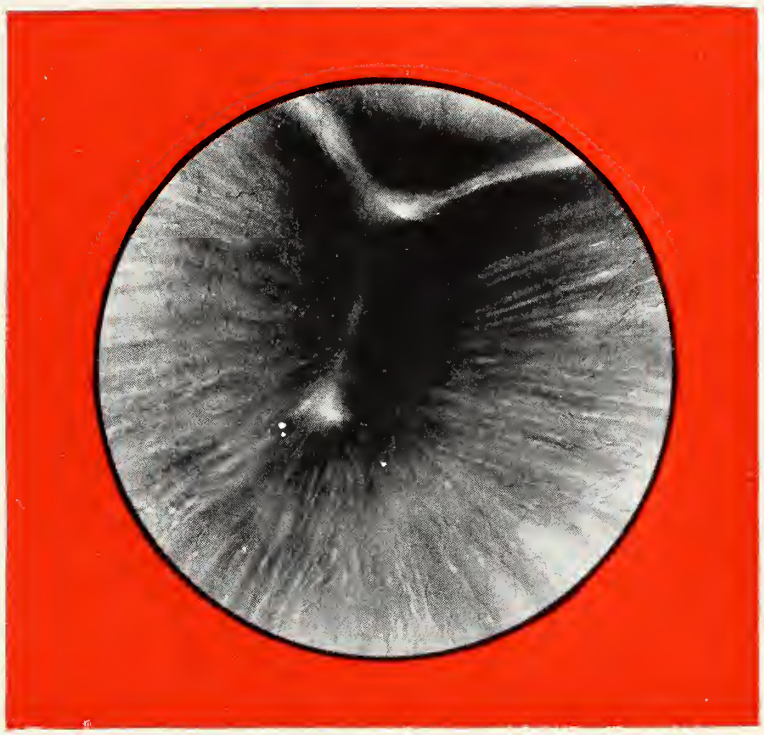
GRASS-ROOTS OPPOSITION TO SOCIAL SECURITY MEDICARE

Congressional polls are showing strong grass-roots opposition to any medical-hospital plan for the aged under the Social Security system. Twenty-three polls so far have asked for an opinion on the controversial issue. In one it was revealed a majority favored the plan. The questionnaires were sent by congressmen from both parties and from all sections of the nation.

Some 211,666 individual responses were included in a tabulation of the polls, with 134,973 individuals opposed to the use of the Social Security mechanism, 58,121 favoring it, and the remaining 18,572 with no opinion. The tabulation shows that 63.8% of those responding opposed the use of the Social Security mechanism, 27.4% favored it, and 8.8% had no opinion. Comparative percentages tabulated near the close of the 87th Congress were 84.4% in opposition, 39.2% in favor, and 6.4% with no opinion. ◄









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Letters

to the editor

To the Editor:

I read with interest the article by Dr. David L. Adler entitled "The Waning Influence of the Autopsy," published in the July, 1963, issue of *The Journal.* This article is an excellent example of a one-sided point of view. Let me state at the onset that I am in favor of "pathology." I also like most of the pathologists whom I know.

There are several points in Dr. Adler's article with which I must take issue. When the day comes that pathologists in general spend as many of their night hours in the hospital, directly involved with the care of the sick as do physicians, then I will agree with his sentiments that it is inexcusable for the doctors not to get out of bed and drive across town in the small hours of the morning, or to leave their crowded offices, in order to ask the relatives of a just-deceased patient for an autopsy when a nurse can do it just as well, and with long practice may be even more adept than the physician in making such a request. In training hospitals with adequate house staffs, how often does the chief of surgery come over to ask for an autopsy, and how often are these requests made by the house staff?

Dr. Adler complains about the non-scheduled autopsy requests. What he is complaining about is that it interrupts his time at the microscope and the time which he must spend dictating his reports. And there, really, is the crux of my disagreement with him and with my pathologist friends. If Dr. Adler thinks that an unscheduled autopsy is an imposition, how would he feel about being called by the hospital switchboard to be told that an autopsy is now being performed on a former patient just as one is putting on his gloves to begin an operation, or when one has a waiting room full of patients, or in the middle of rounds, or as one is beginning supper because he has not left the office until the time the pathologist had finished his own supper? All that the pathologist has to put aside in order to do an unscheduled autopsy are slides and dictaphones; the physician has to put aside people. It is one thing to put aside people in order to try to save the life of another; it is quite another thing to put them aside to go watch what you can no longer do anything about.

A surgeon scheduling an operation, even an emergency operation, almost always tries to schedule it for the convenience of all interested parties. In any event, he will inform the interested parties who may wish to attend that the operation will be performed at such-and-such a time so that those who wish may realign their schedules.

I believe that if pathologists in general were to contact the physicians and try to work out a mutually relatively convenient time for autopsy of a person whose death was unscheduled, that the pathologists would very quickly find that the number of times that the physicians are present at autopsies would be greatly increased.

I can assure Dr. Adler that physicians request autopsies principally because they would like to see the pathology, and not simply to improve the hospital statistics. If the pathologists would attempt to make it easy for the physicians to be present, they would find themselves performing few autopsies in solitude.

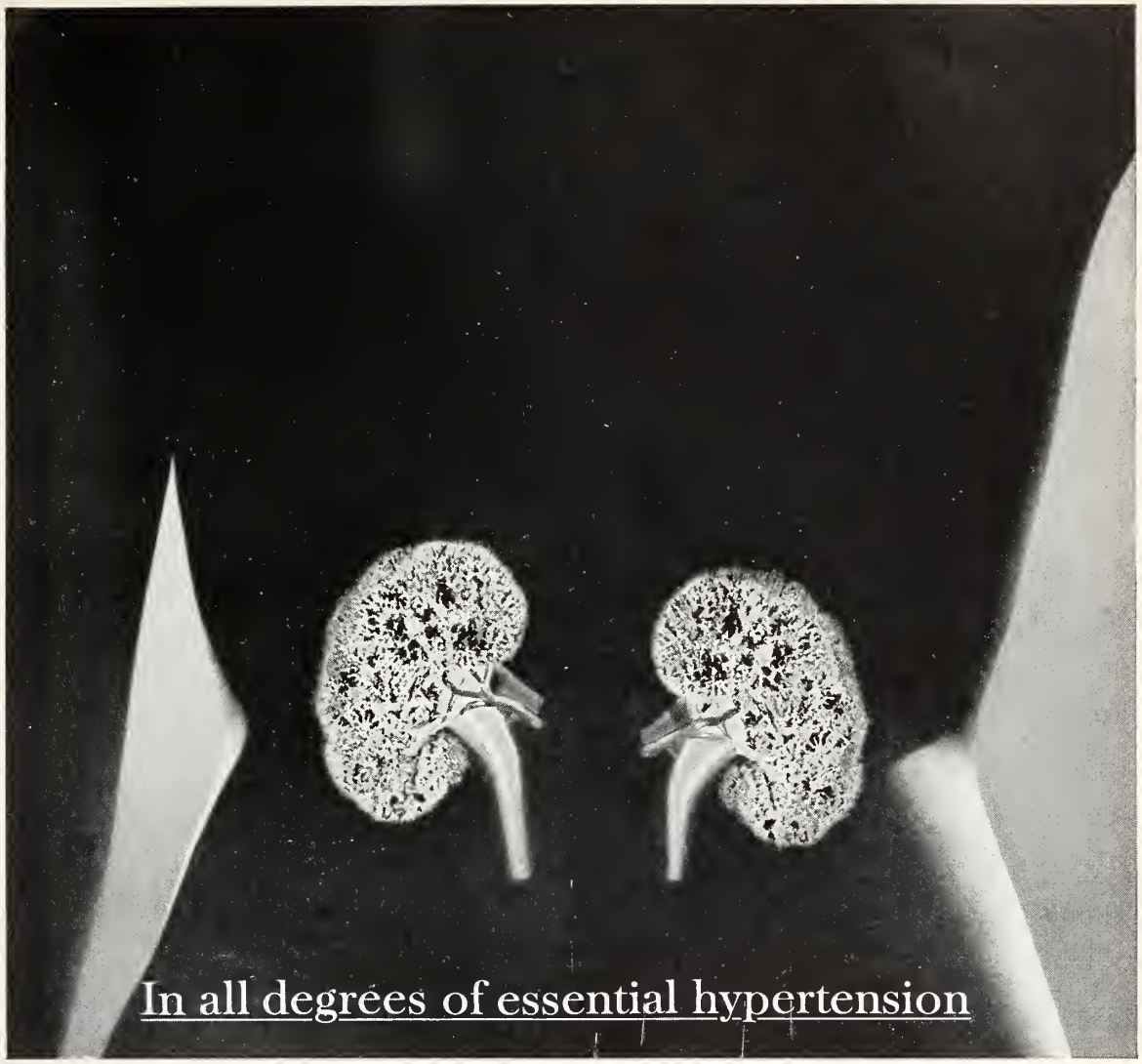
Sincerely yours,
George C. Manning, Jr., M.D.
Fort Wayne, Indiana

(This letter was referred to Dr. Adler. His reply follows.)

To the Editor:

In reading Dr. Manning's letter I find we are in basic agreement on many points. It appears, however, he misunderstands my motives. I am advocating "communication" between pathologist and the attending physician so that the autopsy will be meaningful to both. I know full well the burdens of my non-pathologist colleagues and often wonder how they manager to survive the workload many of them shoulder. I am aware, also, of the attitude of some who

Continued



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References: (1) Moyer, J. H., and Heider, C.: Am. J. Cardiol. *9*:920 (June) 1962. (2) Brest, A. N., and Moyer, J. H.: Pennsylvania M. J. *63*:545 (Apr.) 1960. (3) Berry, R. L., and Bray, H. P.: J. Am. Geriatrics Soc. *10*:516 (June) 1962. (4) Hutchison, J. C.: Current Therap. Res. *4*:610 (Dec.) 1962. (5) Feldman, L. H.: North Carolina M. J.: *23*:248 (June) 1962.

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suspect the pathologist has nothing to do but look at a few slides and dictate reports. The truth is all of us are busy and the dedicated pathologist assumes a host of duties not generally appreciated.

Careful interpretation of my editorial will convince Dr. Manning that consultation with the pathologist by the attending physician prior to autopsy is imperative. Most pathologists will then try to arrange a mutually satisfactory time for doing the autopsy. If the physician cannot possibly attend, no fault accrues to him and no discourtesy to the pathologist is intended.

But when no effort is made to contact the pathologist then indeed the physician is remiss in his obligation. He does both himself and the pathologist a disservice. Proper intra-professional relationship implies consultation between the attending physician and the pathologist. The performance of an autopsy is something more than testing for sugar in the urine. It is time-consuming and represents a major effort on the part of many people, including pathologist and/or resident, tissue technician, secretary, etc. Such effort must not be expended unless the benefit to be derived is comparable.

The admonishing tone of my editorial applies equally to the pathologist. For him to be maximally useful, he must show that degree of courtesy to his colleagues as will ensure mutual respect. He must not operate in a vacuum and perform an autopsy without first speaking with the physician concerned. He must not be concerned only with his own schedule but should try, when possible, to select a time that will be satisfactory to the attending physician. Ordinarily, since the pathologist is "captive," several "times" will be open to him and he should subordinate his own desires to those of his colleague, since the latter's "time" really is not his own. To the degree that pathologists disregard the above, so will their image be tarnished.

I am arguing, actually, for consultation between the two, a cooperative effort that is needed to augment the importance and influence of the autopsy. The pathologist and his medical colleagues are not adversaries but partners engaged in the practice of medicine. When communication is lacking, when mutual respect is low, when consideration for each other's problems is nonexistent, the quality of medical care needlessly suffers.

I refer Dr. Manning to an editorial I wrote in *The Journal* of the Indiana State Medical Association, Dec. 1961, Vol. 54, No. 12, pp. 1799-1800, "The Pathologist and The Microscopic Slide." He will find me stressing communication between pathologist and his physician friends. I know of no other way that both can cooperate to ensure better patient care.

Sincerely,

David L. Adler, M.D.
Columbus, Indiana ◄

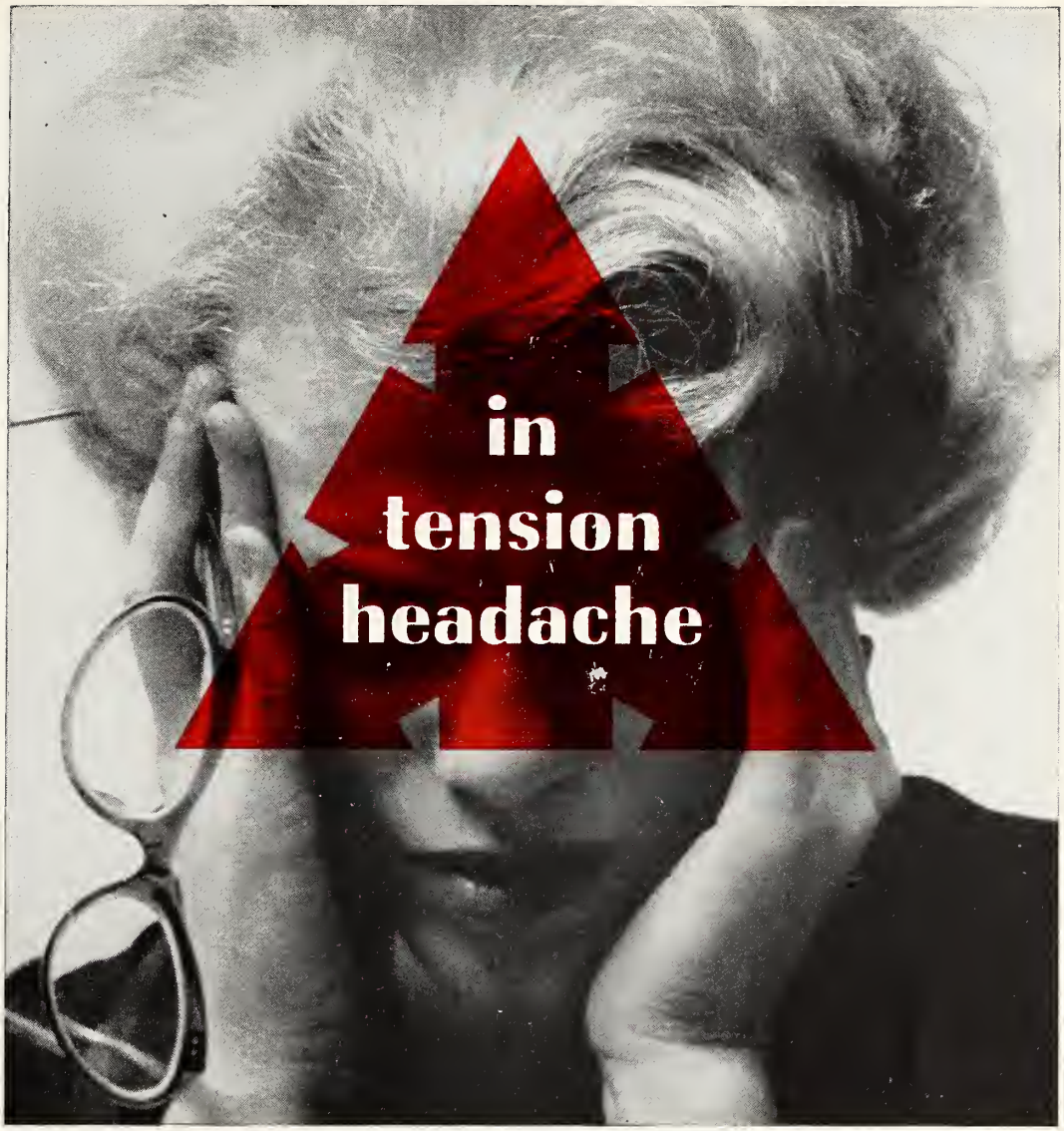
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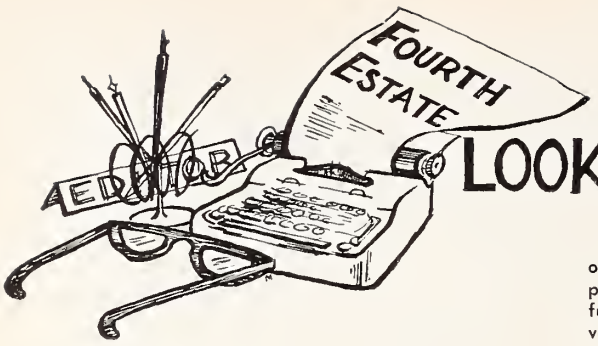
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LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentation of opinions which appear on the editorial pages of the public press, and which are of interest to the medical profession. Its function is to review comments which may be favorable or unfavorable to medicine. Members are invited to submit editorial clippings for this column.

It's Your Money

Congress is spending $27,473 to provide members with 1964 calendars.

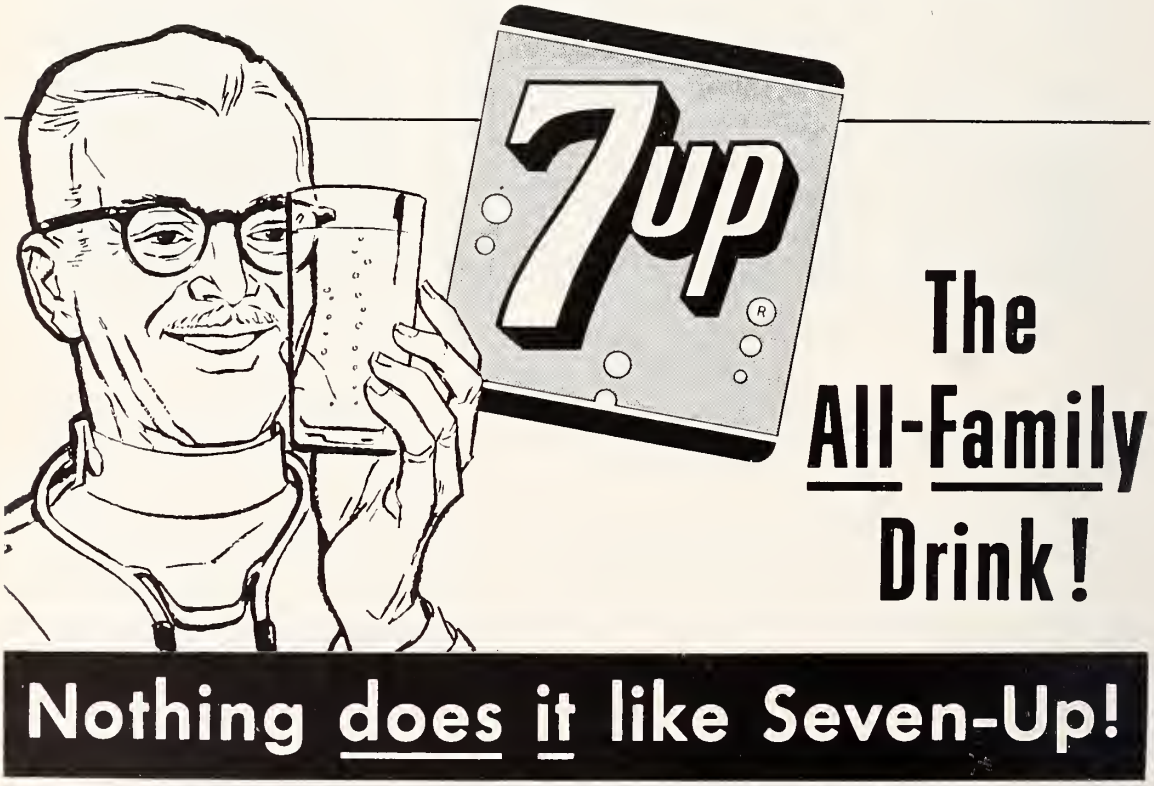
Each member gets 10 calendars and more if they request them. Representative Paul J. Jones (D-Mo.) commented:

"To me this is an utter waste of money and I intend to try to stop it. With millions of calendars of every conceivable size and design being distributed by all types of businesses as well as individuals, I can see no reason why the Congress should approve this waste of money."

But Congress went ahead and approved the calendar funds the day after Jones' remarks.—*The Indianapolis News*, June 17, 1963.

You Paid For It

"The voice of the turtle" is certainly being heard in this land of ours. When you paid your Federal income tax did you know that part of it would go to finance a study, by the National Science Foundation, of what makes a turtle tick? It only cost $78,000 of your tax money.—*The Indianapolis Star*, June 7, 1963. ◄



The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 56 — September 1963 — Number 9

Traumatic Rupture of the Bile Ducts

JOHN A. WALDHAUSEN, M.D.
JAMES A. KILMAN, M.D.
HAROLD KING, M.D.
*Indianapolis**

ALTHOUGH APPARENTLY not common, injuries to the extra-hepatic biliary tract following blunt trauma to the abdomen have been recognized more frequently in recent years. Previous reports have recommended a variety of surgical procedures for treatment including simple drainage, cholecystostomy and direct repair of the disrupted common duct. Recently, we successfully treated a child with a complete traumatic disruption and partial disintegration of the common bile duct by a Roux-en Y choledochojejunostomy. Although not previously described, it is our impression that this technic is of value in the management of such cases.

Case Report

The patient, a 19-month-old female child, was admitted to the hospital with the chief complaint of jaundice. Approximately two months previously she had been run over by a car. A wheel had run across the right shoulder, chest and abdomen. The patient was taken to a local hospital and found to have fractures of the right humerus, right clavicle and three lower ribs on the left. She had vomited some coffee ground-like material. She appeared to be recovering from the injuries when, on the fourth day following the accident, she developed jaundice, anorexia, lethargy and intermittent fever which lasted until she was admitted to the Indiana University Medical Center. She lost seven pounds of weight and began passing dark urine and clay colored stools.

Physical examination revealed a pale, icteric white child who appeared chronically ill but was in no acute distress. Other positive findings were confined to the abdomen. It was slightly protubrant. There were no scars. It was not tender, but a smooth liver edge could be felt two finger breadths below the right costal margin. There was no ascites. Bowel sounds were present. The stools were clay colored.

The hemoglobin was 9.4 gm., white blood count 11,600 per mm^3, bilirubin 6.0 m.g. %, direct 3.1 mg. %, indirect 2.9 mg. %, cephalin flocculation 4+, total protein 7.1 gm. %, serum transaminase 158 units, thymol turbidity 23 units, prothrombin time 18 seconds, alkaline phosphatase 9.5 Bessy-Lowry units.

Roentgen studies revealed the fractures to be healing well. An upper gastrointestinal examination was within normal limits. On September 29, the patient was explored

* From the Department of Surgery, Indiana University Medical Center. Supported by a grant from the James Whitcomb Riley Memorial Association.

through a right subcostal incision. Tissues in the right upper quadrant were bile stained. The gallbladder was markedly distended. Upon dissection of the portal structures it became evident that a greatly dilated common hepatic duct terminated after it was joined by an enlarged cystic duct. (Figure 1) There was no evidence of a common bile duct. Scar tissue firmly bound the duodenum to the retroperitoneal structures.

Internal biliary drainage was accomplished by the Roux-en Y principle. An eight-inch segment of jejunum was interposed between a jejunojejunostomy and the common hepatic duct. The anastomosis of the common duct to the jejunum was not splinted. (Figure 2)

The post-operative course was uneventful, and the patient was discharged from the hospital two weeks later. At this time her liver function tests were normal. Three weeks following discharge, the patient returned to the hospital because of an episode of melena, her hemoglobin had dropped to 8 gm. An upper gastrointestinal roentgen examination, a small bowel series, and a barium enema failed to show the site of bleeding. Since then the patient has been asymptomatic.

Discussion

Traumatic rupture of the bile ducts often is not recognized immediately. Many patients develop bile peritonitis, the early manifestations of which may be quite vague. Thus, after an initial period characterized by shock, pain and tenderness of the abdomen, the patient appears to recover only to become ill four to eight days later with the development of jaundice due either to bile peritonitis or to biliary obstruction. It becomes evident that exploration is indicated. Aspiration of bile from the abdominal cavity will substantiate the clinical diagnosis. In some patients such as ours, traumatic necrosis of the bile duct followed by atresia of the proximal duct and obliteration of the distal macerated duct occurs without a history suggesting bile peritonitis.



FIGURE 1

DRAWING of portal triad showing absence of common bile duct.

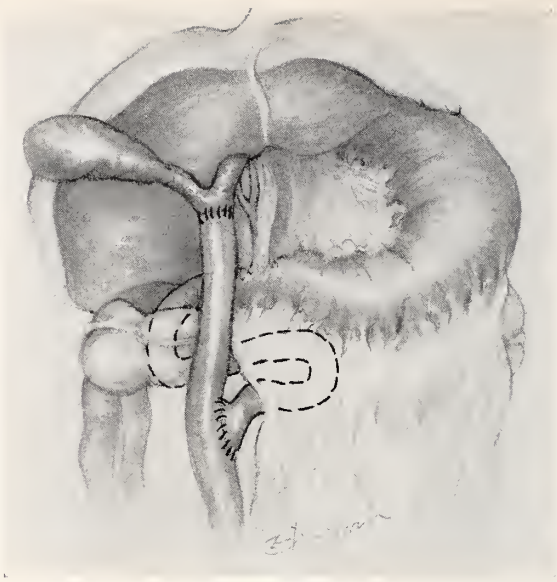


FIGURE 2

DRAWING showing Roux-en Y anastomosis of jejunum to common hepatic duct.

Treatment of patients with traumatic rupture of the bile ducts has varied from repeated aspirations of the peritoneal cavity to direct end-to-end anastomosis of the disrupted common duct.[3,8,10] Not all injuries are of the same type or magnitude, thus surgical therapy must vary with the operative findings. Those patients who have only a small tear with partial disruption of the ducts have been managed successfully by simple drainage of the right upper quadrant. This is more effective than therapeutic paracenteses.

Cholecystostomy as a method of biliary decompression has been used effectively in this condition.[4,8] It also has been of help in common duct obstruction due to associ-

ated traumatic pancreatitis as in Hicken and Stevenson's case.[6]

Cholecystoduodenostomy has been used repeatedly in the past for repair.[7, 8] Its main advantage is ease of anastomosis. It does, however, carry a definite risk of cholangitis. Thus the patient described by Gross[5] eventually developed recurring cholangitis, cirrhosis and died of bleeding esophageal varices. Because of this complication, the Roux-en Y principle has been advocated for repair. If the length of jejunum leading from the biliary tract is adequate, regurgitation of intestinal content into the biliary tree becomes unlikely. The main disadvantage of the Roux-en Y technic is that it is somewhat more difficult to perform. It also could be ulcerogenic as the biliary drainage is diverted from the duodenum leaving the latter protected only by the alkaline secretions from the pancreas. Although no ulcer was demonstrated in our case following the episode of gastrointestinal bleeding, this may have been the cause. A more likely explanation is hemobilia due to previous liver trauma.[9]

Traumatic necrosis and hematoma of the hepatic parenchyma may be followed, after a variable interval, by a fistula between bile ducts and blood vessels and result in gastrointestinal hemorrhage.

Recently Donald[3] and Tolins[10] have reported successful repair of the common bile duct following traumatic disruption. Experience with operative injuries has shown direct anastomosis to be followed by relatively good results. Thus Cattell[1] reported good results in 57% of patients. Unfortunately, repair may not be possible in those injuries resulting from blunt trauma to the abdomen due to the absence of a portion of the duct. It is in these patients that the use of the Roux-en Y technic is advantageous.

Summary

The successful treatment of a 19-month-old child with complete disruption of the common bile duct due to trauma is described. A Roux-en Y choledochojejunostomy was performed. This technic is advocated as the most physiologic in those cases in which the distal common bile duct has been destroyed.

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The Case of the Terrified Hero

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

THE TYPICAL ASTHMATIC wheeze of this person could be heard even before he entered the consultation room. He was a slight man not over five feet two and weighing 115 pounds. His chest, and indeed his entire body, was concentrated on the labor of breathing as he paused and inhaled deeply from a nebulizer. He used it with a deftness bespeaking long experience. In spite of his obvious discomfort, he managed with an effort a broad, almost boyishly captivating smile which was rescued from being a grimace by his sparkling blue eyes. The pallid, snub-nosed face was crowned by a thick shock of curly hair controlled firmly by a well-combed Navy haircut.

His Irish name was on the neatly typed card lying in front of me. His age was there also—31. His referral was by Mr. Brown, a very dear personal friend and patient whom I had been fortunate enough to restore to reasonable health after he had been sent out West to die of cardiac asthma. The card did not mention the broad stripe of an admiral decorating the neat and well-worn Navy uniform. The regulation trousers were immaculately creased and the examining eye went on automatically to tiny feet encased in the usual Cordovan shoes. The almost translucently pale eye sclerae bespoke a severe anemia and a prolonged period of hospitalization. His low-pitched, "My name is O'Mara," was barely audible yet had a musical, pleasing timbre to it. The hands were femininely small, scrubbed scrupulously clean, and tapering to end with closely trimmed, square-cut fingernails almost as pale as the lobes of his ears.

He moved to the proffered chair with almost a mincing prance reminiscent of a gamecock. A sissifying effect was prevented by the uniform which bore rows of ribbons and battle stars crowned by the rare emblem of the Congressional Medal of Honor. As the patient's breath continued to return, I made the opening gambit of asking how long the admiral had been using Adrenalin. The answer came softly and yet had the crisp Annapolis twang, "No more than once or twice a day. Also, I'm told to keep my requests for intravenous aminophylline down to a minimal must."

Editor's Note

The Case of the Terrified Hero appeared in its original form in the *New York State Journal of Medicine*, Vol. 58, No. 7, 1958; the *NYSJM* kindly gave permission for it to be reprinted in *The Journal*. The only changes made are of a minor nature and have been made to conform with the style of Dr. Lieberman's series of "Cases" which have appeared as a regular series in this publication.

A Martial Outside . . .

The story as unfolded was along the expected lines. The flu was followed by asthma. He was shipped from Europe back to the States and hospitalized at Bethesda Naval Hospital, then Mayos', Lahey's, Cleveland Clinic, etc. Nothing seemed to help. He was promoted a rank, retired, and advised to live in a dry climate. He had just come to this city and had looked up Mr. Brown, an old family friend. Mr. Brown had advised him to introduce himself to yours truly, especially in case emergency treatment might be needed. Admiral O'Mara had brought along a bulging brief case with the photostats of his entire record. I was glad to accept this material and made an appointment for an examination the following Monday.

That evening after supper, I leafed through the voluminous file. It was personally commendable but medically rather barren—parents alive and well; two brothers, ditto; numerous childhood ailments; refused admission to West Point because too small, but accepted at Annapolis after very high political intervention; good student; excelled in swimming, fencing, boxing, judo and tennis; graduated in upper tenth of class; married and went on usual assignments; almost immediately engulfed in World War II; numerous volunteer missions of most hazardous nature; long list of citations for this and that; on the beach on D-day as commander of a volunteer battalion; sole surviving officer still on his feet; Medal of Honor and battle promotion to commander—again, battle promotion to captain.

Then the medical story: hospitalized after severe flu; finest treatment available; invalided to the States as asthma worsened; finest talent in consultation; then, an exhaustive summation of the entire case; discharge note; suggestions for further care—finis! I did not anticipate anything much different, yet I felt depressed. Nothing seemed to have been overlooked, and yet the result could hardly have been worse. What could I offer the patient?

The next day was Sunday, and my wife and I had dinner with the Browns. Afterwards, over a liqueur and a cigar, Mr. Brown began to reminisce about Admiral O'Mara's family. Back on Long Island the Browns and O'Maras had been members of the same outdoor set that included the Oyster Bay Roosevelts. That is why the three O'Mara boys were called also Archie, Quentin, and Kermit—the patient under discussion. The men were all big bruisers leading the strenuous life advocated by Teddy Roosevelt—all, that is, except Kermit. Mr. Brown shrugged his shoulders eloquently.

"The baby was unlucky from the beginning. Every ailment around, he got. He was always a problem—terrified of the dark, terrified of the doctors sticking needles into him, terrified of his father towering over him—just terrified, period." Mr. Brown could be very emphatic.

The Whining Schoolboy

"In kindergarten the youngster developed a whine. He was the very bottom of the pecking order and children can be merciless to the last one on the totem pole. When the little monsters would gang up on Kermit, he would run home like a puling calf. We could hear him clear in our home. That is when he acquired the moniker of 'Whiney-Squeak.' Well, one day some years later a couple of really fiendish boys trapped Kermit in a blind corner of the playground and started to really savage him up. Some of the details of that skirmish we got later, much later. 'Whiney-Squeak' was really cornered, there was no escape. And then the strangest thing happened. Apparently, little Kermit went berserk in a sort of blind, panic reflex, much as a rabid dog. He turned on his tormentors, grabbed a piece of planking that was handy, and went after both boys, flailing the wood, howling like a mad dervish and sobbing convulsively all at the same time. One boy was knocked half unconscious; the other had his face gashed. Luckily, the eye was missed. The bullies were now blubbering with pain and fright; Kermit was screaming and wailing. There was general pandemonium as a teacher ran up and tore the children apart.

"Kermit must have been about nine at



". . . grabbed a piece of planking that was handy. . . ."

the time. There was a hellish row, but all the families involved were close personal friends so the whole thing was held sub rosa as we say in law—hushed up, in plain English."

Reflectively, Mr. Brown pulled at his cigar. "There was no more 'Whiney-Squeak' nonsense after that. Once, when a bigger boy was razzing him, Kermit gathered himself silently, leaped on the lad, and bit him, fighting with the ferocity of a wolverine. Kermit became a completely different lad. He just stopped complaining about anything ever. He almost died of a ruptured appendix years later in his teens just because he would not report the agonizing pain in his side. Now mind you," Mr. Brown went on, "Kermit did not become a bully or anything like that. He went in for sports, he was the most well-mannered lad ever, and with the ladies he was tops. The debutante of the season chased him. Funny thing! I wonder if Kermit really loves her —now his wife. I always felt that, to him, she was just another challenge."

Seeking the Bubble Reputation

I had listened with fascinated attention. The conversation had been actually far longer than recorded, since numerous meanders have been deleted. Admiral O'Mara had not, as yet, been examined by me. I am not a psychiatrist, but the diagnosis was there, plain to see. Mr. Brown was the Sherlock Holmes giving his Dr. Watson the essential clue overlooked by all the experts. How were they expected to think of this winner of the Congressional Medal of Honor as a terrified little boy? Very clearly, the admiral was being driven subconsciously by the need to prove to himself that his terrors were under lock and key. The superego was repressing the id ever since the day that Kermit had been forced into a fight. His later training reinforced his mastery over the blind, panic terrors of his babyhood. Kermit was unaware of what had been driven deep into the subconscious. He had no inkling of why he had the relentless compulsion to be always proving his courage.

He was already physically exhausted when the flu dropped him. The complete collapse that followed weakened the iron control of the waking mind over sternly repressed id. The conscious mind could not admit the presence of a terror, so asthma, the pure, socially acceptable conversion syndrome developed. But how was I to treat this hysteria? Even a hint of a psychiatric referral could set off the most devastating repercussions. Psychoanalysis had to be disguised as organic therapy. A way had to be found for Kermit to dredge his own subconscious without being aware of what was being done. I felt myself challenged by the most difficult problem of my entire career.

The next morning I approached this problem warily. As expected, the physical examination of Kermit O'Mara revealed only the rather severe secondary anemia coexisting with the asthma. I had outlined a tentative approach, and now I began setting the stage. "In addition to the asthma, sir, you are run down and you do have an anemia of a high order. To correct all these things will take time. Now, also, there are several things that have not been tried with you. Of course, very competent men have seen you and I don't want you to think I am so conceited as to have glib answers to your problems. I am thinking of trying these things out even if, as you

well understand, I would be the last person offering a guarantee of success. Still, I have had good luck with cases much like yours."

The Wounds Invisible

While we were talking, I called for a syringe and gave the admiral his first tiny dose of stock respiratory vaccine. The standard form permitting treatments was signed by the admiral at the same time. The language was broad enough to include the therapy I was considering. The patient was asked some casual questions about life on Long Island. He was made to lie down for a good 15 minutes, and the conditioning was begun. The routine of respiratory desensitization was explained in unhurried detail. The senior nurse sat by the couch and had a friendly chat. And so began the three-times-a-week office calls.

The intramuscular vaccine was succeeded by the intravenous series. The patient accepted the "shakes" as something to be expected and completely harmless. Then came the switch to intravenous, subconvulsive Metrazol therapy. The drug was not named but merely mentioned as "reenforcement" of the preceding medication. Ambiguous terminology carefully avoided even a hint of anything psychiatric.

I had been working on this method for many years as an idea of my own. I was to publish the work on subconvulsive intravenous Metrazol therapy many years later.[1,2] I hoped to loosen Kermit just enough to permit adequate self-release without any real convulsive shake-up. The patient remained oblivious of the transition in the type of treatment he was receiving.

Each office call was made the occasion for a little chitchat; apparently just sociability, but actually real probing into his long-forgotten childhood. A tactful leading question, then free rein to just talk. It was very instructive to learn that the admiral had completely forgotten most of the fight with the bullies that Mr. Brown had so epically described. Only after repeated prod-



". . . with the ladies he was tops. . . ."

dings was there recall of what had really happened.

Of course, I had the priceless advantage of knowing what had really taken place. This made it relatively easy to steer the admiral into channels while allowing him to think that he was guiding the conversation himself. Still, occasional, unexpected, important information would come out. As an example, Kermit talked at length and with feeling about how inferior he was made to feel even as a preschool toddler. His extreme resentment of his physical limitations was amazingly vehement.

So the weeks and months went by. At first, there seemed to be a total lack of success. Then one day, Mrs. O'Mara brought one of the children to the office for some minor complaint. As she was leaving, she remarked, "You know, Doctor, Kermie seems to be changing. Even at our most intimate moments there had been always a barrier between us. Now, lately, I sense it no longer. He seems more relaxed."

The admiral did begin to relax visibly. As he would lie on the couch in the postshock state, he would reminisce freely, talking about many long-forgotten events. The asthma did begin to loosen. The attacks be-

[1] Lieberman, A. L.: *Geriatrics* 9: 125 (Mar.) 1954.

[2] Lieberman, A. L., Schwartz, S. S., Cooper, M.: *ibid.* 9: 371 (Aug.) 1954.

came less frequent and not so severe. The patient began to put on weight, sleep better and assume a greater interest in life. He started helping the children with their lessons. The O'Maras joined the country club and Kermit started to play tennis. He went on a hunting trip. Within the year he was taking courses at the university. Inactivity was making him restless.

I'll Warrant Him Heart-Whole . . .

The following winter the senior O'Mara died suddenly. Kermit came to New York for the funeral. In spite of rough weather and the severe emotional strain, there was not a sign of the asthma during the entire trip. Admiral O'Mara encountered some highly placed friends and received offers of tempting assignments. The Korea "police action" was just starting. After his return from the funeral, Kermit did not mention any of this to me—by this time he was coming to my office only once a month for maintenance injections.

Then there occurred an occasion when the O'Mara and Lieberman families all had dinner at the Brown's and we three men were sitting by the swimming pool in the patio. Rather abruptly, Kermit spoke up, "What would you fellows think of my taking a liaison job at the Pentagon?" There was just a bit too much casualness about the question. I started and took a long look at the handsome, deeply tanned admiral. Then I leaned back and drawled, "Why not? If the weather gets too blustery you can always come back here. Still, if you continue your monthly shot of vaccine, I do believe you can turn the trick. Just don't look for the flu bugs and don't forget your iron and vitamins."

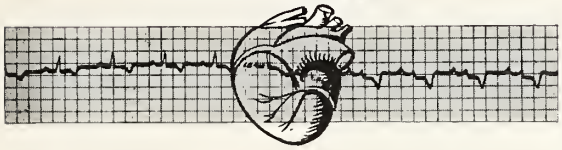
I hoped that I had put just the judicious shade of emphasis on the pedestrian, purely physical, aspects of the problem. The admiral had no inkling of the psychosomatic angles of the disease he had licked. Why bring that up?

"Well, Doctor! Never will I be able to thank you enough for what you have done for me. Only sorry that your fee was so meager."

And there the case of the now de-terrified hero rests. I was given enormous kudos for the wrong reason. Mr. Brown does not suspect that he was the Sherlock Holmes furnishing the decisive clue. Undeniably, Admiral O'Mara is back East and very happy in his work. Not even Conan Doyle would have expected a case more thoroughly solved and better treated. Only me, Dr. Watson, is left with a hankering to report the case—well disguised—in a medical journal. ◄

1270 Fifth Avenue
New York, N. Y.

Electrocardiogram of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Krannert Heart Research Institute, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

Electrical Alternans

CHARLES FISCH, M.D.
Indianapolis

ALTERNATION of configuration of electrocardiographic complexes has been considered a rather rare abnormality. However in our experience this pattern seems comparatively common. We have encountered the 2:1 variant of the alternans five times in the last 6,000 cardiograms. Two of the cases were reported previously in this *Journal* under *EKG of the Month* (April 1962, September 1962). Recognition of this pattern is extremely important and useful because it practically always indicates massive pericardial effusion with critical cardiac compression (tamponade). The association of the alternans with critical tamponade is indicated by its rapid disappearance after removal of small amounts of pericardial fluid and concommitant improvement of hemodynamic abnormalities.

The case presented here is characteristic of a 2:1 alternation of the QRS complex and also demonstrates the prompt elimination of the alternans by removal of pericardial fluid.

The patient was a 29-year-old male admitted because of progressive dyspnea. On admission he was found to be in acute distress with all the classical findings of acute pericardial tamponade. The EKG reproduced in Figure 1 shows alternation of the QRS complexes (left portion). Following aspiration of the fluid (right portion) the alternans disappeared parallel with improvement of the patient's condition.

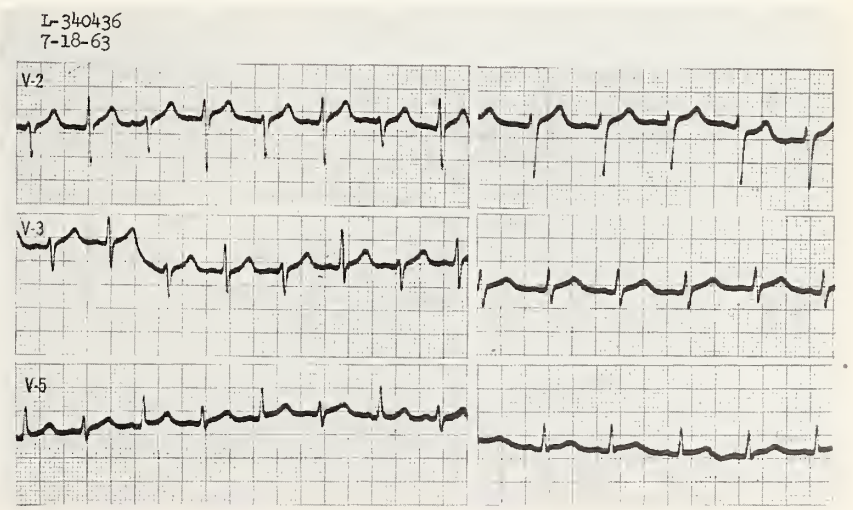


FIGURE 1
THE ALTERNATION of the QRS complexes on the left and its disappearance following pericardiocentesis (right).

X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

Trans-sphenoidal Hypophysectomy By AU 198 Implant*

ERICH K. LANG, M.D.†
Indianapolis

THIS 46-YEAR-OLD white female was admitted for terminal care of a metastatic carcinoma of the breast. The patient had been subjected to a radical mastectomy some nine months previously followed by a course of Cobalt 60 therapy to the supraclavicular and internal mammary chain area of the homolateral chest wall. A dose of 4500 REP T.D. had been delivered in five weeks. Three months after completion of external therapy and five months after first diagnosing the disease entity, the patient was found to have extensive osteolytic metastasis. An oophorectomy was carried out and crossed hormonal therapy with testosterone was instituted.

In spite of this, the patient continued to show a rapid downhill course. At the time of admission a bilateral massive pleural effusion and a nodular and enlarged liver were noted. The alkaline phosphatase was markedly elevated.

A trans-sphenoidal hypophysectomy with implantation of five millicuries of AU 198 was carried out. The patient showed no untoward effects following the procedure. A marked subjective improvement was observed within three weeks after implantation of the radioactive material. The bilateral pleural effusion disappeared within eight weeks of the implantation. At no time did the patient show biochemical evidence of a complete hormonal ablation. Substitution therapy of mineralo- and glycocorticosteroids, as well as ACTH, was not necessary. The patient was followed in a state of marked improvement and generalized well-being for an eight-month period. However, there was no evidence of remineralization of the osteolytic areas involving almost the entire skeleton.

Twelve months after trans-sphenoidal hypophysectomy the patient succumbed to her disease in a state of cachexia but without pain or recurrence of the marked pleural effusions.

Trans-sphenoidal radiation hypophysectomy has been proven to be an effective means of pain control in terminal carcinoma, and particularly in breast carcinoma with disseminated osteolytic metastases. While no claim is made that there is any regression of the tumor mass itself, a patient will usually enjoy a period of relative well-being and absence of pain. In our experience there has been no prolongation of life nor has the disease progress been checked. The method relies on a partial

* Supported by a grant of the John Hartford Foundation.

† Acting Director of Radiology, Methodist Hospital.

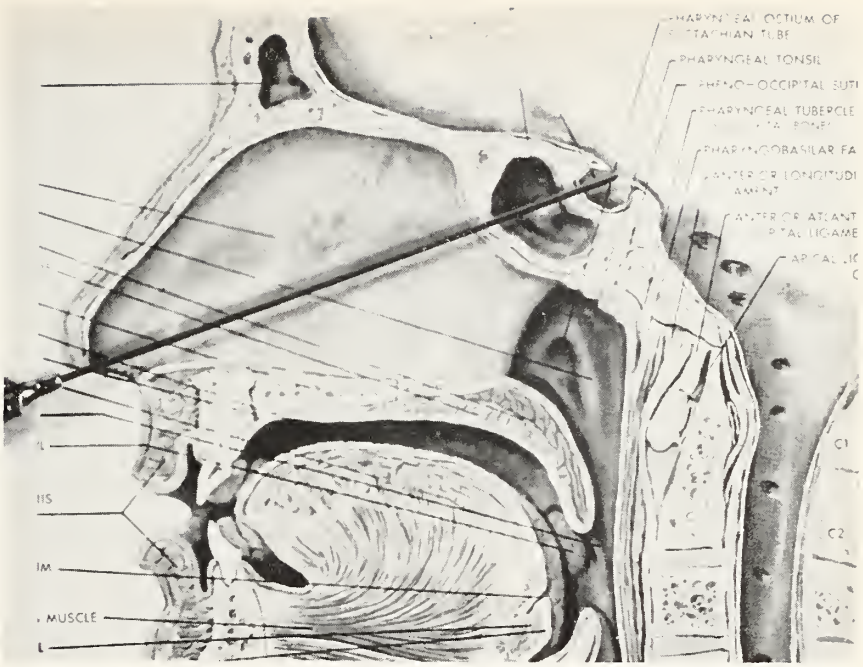


FIGURE I

INTRODUCTION of an 18 gauge thin-walled needle through the nostril and the sphenoid sinus into the pituitary fossa shown schematically.

ablation of the pituitary gland and histologic sections of postmortem specimen of the pituitary show evidence of a large amount of functional tissues.

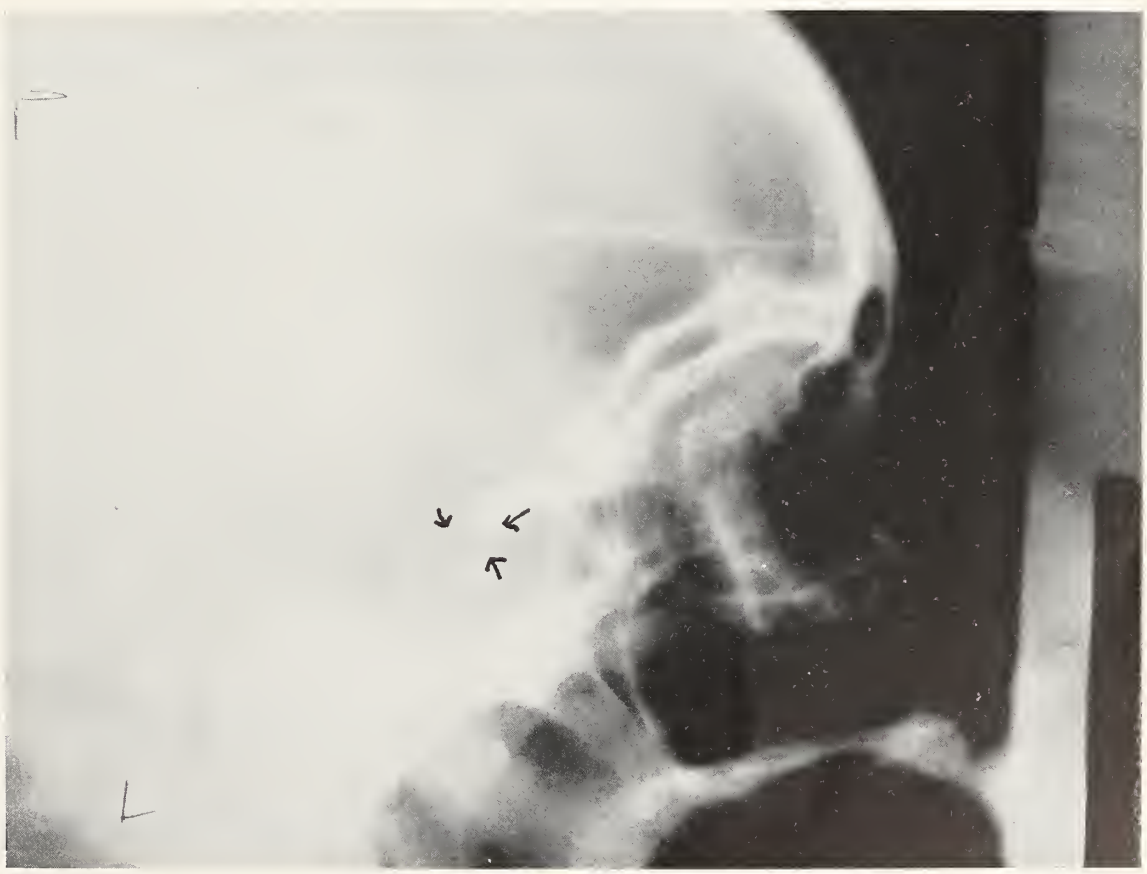


FIGURE II

ROENTGENOGRAM of localization of a gold 198 seed in the upper quadrant of the pituitary.

Technic

After local anesthesia with cocaine crystal solution, a gauge 18 thin-walled lumbar puncture needle is advanced through the nostril and the sphenoid sinus into the pituitary fossa. The procedure is monitored fluoroscopically to maintain perfect midline position. Localization films may be obtained after the tip of the needle has been advanced into the upper and posterior quadrant of the pituitary fossa. A radioactive seed, AU 198, yttrium 90 or Radon, is then introduced into the pituitary with a plunger. The seed should be placed high into the pituitary since it will gradually settle toward the bottom of the gland due to radiation liquefaction of the immediate adjacent tissues. A dose of 10,000 to 60,000 rads is delivered within two to three millimeters of a five millicurie AU 198 source. A longitudinal sausage-shaped area of complete destruction of the pituitary gland is seen on histologic section of this structure. Though there is no claim to complete ablation of the pituitary, a destroyed area will usually suffice to give the desired effect. The procedure has no significant rate of complications. ◄

From *The Journal* 50 Years Ago

. . . The proper administration of ether requires much more skill than that of any other anesthetic, either local or general. Not a little will depend on the manner of the anesthetist.

* * * *

So far as the devices for the administration of ether are concerned, it does not matter much what they are so that they can be used without the withdrawal of the device from the face of the patient. The mask should have a sufficient surface so that, notwithstanding the constant dropping of the ether, there will at all times be a dry surface on which the ether may be dropped, because naturally a liquid like ether volatilizes much more rapidly and efficiently if dropped on a dry surface.

There comes a stage in ether administration when the patient stops breathing, but the fact that the heart is good and the skin a good color shows that this condition is apparent and not real, and here it is not uncommon to see the inexperienced anesthetist begin shouting to the patient to breathe and to press on the chest in an ill-directed effort to establish the supposed-to-be stopped respiration. At this stage the patient is semiconscious, knowing much of what is going on and the alarm of the anesthetist passes to the patient and it is then almost impossible to secure a good anesthesia. This, of all times, is the time to crowd the ether. Five or six minutes are sufficient to anesthetize the ordinary patient and this is not knocking him down with the anesthetic. The patient is much better off to be well anesthetized in five or six minutes with two or three ounces of ether than he is to be anesthetized in 60 seconds with a pound of ether. Once the operator is through the abdominal wall the amount of ether used can be much diminished. However, this does not apply to acute peritoneal inflammations. The habit of punching the eyes to determine whether or not the patient is anesthetized is a bad one. The many reasons are obvious. The anesthetist who cannot tell the condition of his patient without resorting to this practice should retire. . . .—"Some Observations on the Details of Abdominal Surgery," Thomas B. Eastman, M.D., *JISMA*, September, 1913.

The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

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Are Verbal ℞'s to a Patient Advisable?

A WRITTEN RECORD, in the form of a prescription, should authenticate practically every verbal prescription of a drug by a physician.

A recent nationwide survey by the *American Professional Pharmacist* asked the question: "Should the physician give drug information verbally to the patient?", and obtained the answer: "In the interest of the patient's health and safety, the physician should write prescription orders—or phone them to a pharmacist."

Irving Rubin, Editor of *American Professional Pharmacist*, has listed the reasons for the rule. Written prescriptions will help to eliminate errors based on *sound-alike drugs*. In the case of drugs available in several forms and strengths a written Rx will assure the dispensing of the proper form and strength.

Often the patient will forget the dosage and may confuse "before meals" and "after meals", or take the medicine every three hours instead of three times a day. In the case of "prescription only" drugs the pharmacist will not be able to furnish the medicine unless a written prescription is given the patient or the physician phones the druggist.

Written prescriptions also tend to limit the prescribing by one patient to another. And finally the written prescription preserved by the pharmacist provides a valuable record which is not inherent in the process of verbal prescribing by a physician to a patient.

Much better to obtain the name of the patient's pharmacist or ask the patient to have the pharmacist contact the doctor. Then dictate the prescription to the pharmacist over the phone, insure a written record, and guarantee the patient the proper medication with the proper written instructions.

AMA Program for the Aged

THE AMA PROGRAM for the Aged was adopted by the Board of Trustees in February. It is a rational program, based on respect for the elderly, maintenance of their desire to live, medical care for those who cannot afford it, elimination of the causes

of mental disease and proper care of the mentally ill.

The program has been worked out systematically by the various commissions. Portions of the plan were debated and adopted by the House of Delegates in Los Angeles. The entire coordinated system is now announced in an eight-point program.

First we need a re-evaluation of attitudes toward the elderly. More may be done for the aged by recognizing them as individuals than by treating them as a 17-million-member national problem. The aged should be given a chance to use their time, talents and capabilities in worthwhile and productive activities which encourage self-reliance and independence.

Secondly the Kerr-Mills Law should be implemented and revised. The AMA will continue to urge adoption of Kerr-Mills in all states where the need exists. Existing programs may need expansion. In addition revision of the present law is recommended in the following aspects:

a. The law requires that Old Age Assistance and Medical Assistance for the Aged be administered by a single agency if both assistance programs are in effect. State Welfare Departments administer OAA with a welfare philosophy. A medically oriented agency should administer MAA.

b. There should be flexibility in the income limitations. An individual who has an income of $1600 in a state with an allowable maximum of $1500 and who is faced with a $1000 medical expense is more in need than the individual with $1400 income and a $40 medical expense.

c. Public surveillance is not required now. The AMA favors an amendment providing for a Medical Advisory Committee, with at least two thirds of the members being doctors of medicine not in the employ of governmental agencies.

d. The present law is silent on free choice of hospital and doctor. There should be a clause to prohibit any limitation of free choice.

Thirdly, the income tax laws should be amended to provide more equitable and helpful treatment of deductions and credits for medical expenses of the aged. A taxpayer now may deduct all the medical expenses paid by him in behalf of his or his spouse's 65-year-old father or mother. The AMA favors extending this provision to any dependents over 65. Also the 1% drug limitation should be removed and all drug costs should be treated as medical expenses. Taxpayers over 65 should be allowed to use the carry-forward and carry-back principle on medical expenses which are excessive in any one year. In addition it would be more equitable to give a credit against tax liability instead of a medical expense deduction.

Point number four relates to the further expansion of voluntary health insurance and prepayment plans. The over-65 group is acquiring voluntary insurance faster than any other age group. This trend should be accelerated further.

The fifth AMA point concerns the correction of compulsory retirement plans. The AMA favors flexible policies which allow people to work as long as they are willing to work and are productive.

Number six—"skilled" nursing homes, those with trained nurses and on-premise medical care, have increased in number and in bed capacity by over 100% since 1954. Further increase is needed to upgrade the care of the aged who cannot be cared for at home and to relieve the hospitals of patients who need only good nursing care.

The seventh point calls attention to the need for community programs for health services, recreational facilities and job opportunities, as well as a stimulation of interest among the elderly for work in civic clubs, churches and other organizations.

Number eight is the mental health plank. Some present policies in regard to the aged and some of the lack of proper care of the aged contribute to mental illness. What can be prevented should be prevented by the proper use of the first seven points. Nonpsychotic senile individuals now in mental institutions for custodial care should be cared for elsewhere.

Indians or Chiefs?

(History not only repeats itself, it may be developing similar trends in several unrelated fields. The following is an editorial which appeared under the above title in the April, 1963 issue of *Mechanical Engineering*. It is reproduced with the permission of J. J. Jaklitsch, Jr., editor of that journal.)

HERE'S more food for thought on the subject of engineering education and the trend it is taking: The highly desirable movement toward strengthening the student engineer's knowledge of fundamental science at the expense of handbook "know-how" is being a bit overdone, according to C. C. Furnas, Fellow ASME, and Chancellor of the University of Buffalo. We are in grave danger, within the next decade or so, of having "too many chiefs and not enough Indians." If that does come to pass, engineers as a group may not be able to fulfill their obligations on the applied phases of joint projects. Dr. Furnas made these points in the Tau Beta Pi Lecture which he gave during the annual meeting of the American Association for the Advancement of Science. (An article based on this lecture will appear in a future issue of *Mechanical Engineering*.)

In engineering education—just as in medicine and other professions—there are two jobs to be done: Advancing the profession and practicing in the current state of its art. We have been guilty, in our zeal to raise quality, of neglecting the prosaic role of the average practitioner. Many schools of engineering in the past 20 years have, in effect, posted signs saying: "Only geniuses need apply." This is one impelling reason for the distressing national trend of decreasing engineering enrollments during the past several years.

While it is desirable to provide a sounder scientific education for engineers than was generally true in the past, focusing engineering education on whiz kids only is a dangerous procedure. There should be two paths for engineering education: One should be for those with the ability and the propensity for research and advanced design. This naturally leads toward a heavy basic science input followed by graduate work in engineering specialties. The other should be for the traditional engineer, probably terminating at the bachelor's or master's degree level. The individual decision on the path to be pursued should be made by the end of the second—and certainly not later than the third—undergraduate year. The larger engineering schools are in an adequate position to provide both types of education. Happily, we detect a tendency of the pendulum to swing back in this direction.

Frogs and Freedom

THERE'S AN old story that says that you can't kill a frog by dropping him in boiling water. He reacts so quickly to the sudden heat that he jumps out before he's hurt. But if you put him in cold water then warm it up gradually, he never decides to jump till it's too late. By then he's cooked!

Men are just as foolish. Take away their freedom overnight, and you've got a violent revolution. But steal it from them gradually, (under the guise of "security," "peace" or "progress") and you can paralyze an entire generation. Look at the income tax. It started out at a harmless, sound 1%. It would have been easy to jump out of water as tepid as this, but like the frog, we waited while it climbed ever higher. (Try jumping now!)

Worst of all, we never learn. Even today we cannot believe that Medicare is the same warm water that will one day boil us in Socialized Medicine. We see no connection between farm price supports and Nationalized Agriculture. And if we draw a parallel between subsidized teachers' pay and federal control of education, we are called "extremist."

The tragedies of history are always repeated by those who refuse to learn them.

To seek guidance from the past is not "turning the clock back" as we are so often told. It is merely a good way to keep out of hot water.—L. A. Drolett, M.D., Lansing, Mich. Reprinted from *The Journal of The Michigan State Medical Society*, May, 1963.

Editorial Notes . . .

Francis Boyer, Chairman of the Board of Smith Kline and French Laboratories has been made an Honorary Fellow of the Royal Society of Medicine. Out of a membership of 12,000, Honorary Fellows are limited to one hundred. These are usually doctors of medicine. The honor for Mr. Boyer is heightened by the fact that he is now one of only six non-medical Honorary Fellows and is the first outside Great Britain.

The Aluminum Company of America has announced the construction of a highly automated, light - weight, air - transportable hospital which may be built at a cost 50% below the investment required for ordinary modestly equipped hospitals. The model is a one-story, 33-bed, circular structure made of panels of foamed plastic encased in aluminum. A visitors' corridor is at the periphery and the service elements are at the center. Rooms have built-in showers, water closets and lavatories and service consoles. Prepackaged frozen foods are heated electronically at meal time. Repairs may be accomplished by detaching units and moving them elsewhere for repair while replacement units are put into service immediately.

Clearing the blood of nitrogenous wastes by use of the artificial kidney is so safe the method may be used repeatedly to prolong life and maintain a state of health in patients with chronic kidney disease so severe they would die without treatment. The Veterans Administration now has two artificial kidney treatment centers (Los Angeles and Hines, Illinois) in fulltime operation and expects to have about 30 such centers within three years. Patients usually are treated once or twice a week, and most of them have been able to return to their normal jobs between treatments.

The Pharmaceutical Manufacturers Association together with 44 drug producers has presented objections to the Food and Drug Administration in regard to regulations recently issued concerning drug advertising. The contention is that the regulations go beyond the law and intent of Congress. In the Drug Amendments passed last year Congress specified that, except in "extraordinary circumstances," no advertisement should be subject to prior governmental approval. The PMA feels that one of the regulations subjects virtually all drug advertisements in professional journals to possible federal pre-publication censorship. The petitioners also feel that the regulations are more severe than the law would seem to require on the matter of specifying how drug ads should be designed and written.

One hundred seventy-five dollars worth of medical expense is the half-way point in medical insurance. The insurance premium required to cover the claims for the first $175 of medical expenses for any person in a given year would be about the same as that required to cover the claims without limit for those whose expenses exceed $175 per year. The Health Insurance Institute is urging all families to check their medical coverage and be sure that they have enough, are not over-insured and are not losing premium dollars by way of duplicate coverage. In case the husband and wife both work and are protected by their employers, it would be more economical to have one policy provide the basic coverage for both and the other the major medical or catastrophic coverage. For families who can afford to set aside $175 for each person annually, it is more reasonable to spend their insurance premiums for the claims in excess of $175.

The Public Health Service is launching a two-year clinical study of anesthetic agents. The investigation will be carried out in approximately 20 hospitals. It is expected that one of the objects of the study will be

to determine the safety of halothane (Fluothane). Ordinarily considered one of the safest, if not the safest, of all anesthetic agents, halothane has been associated with a few cases of postoperative hepatitis. It is not clear whether the hepatitis was the result of the basic disease for which the operative work was done or whether the anesthetic agent predisposed its development. The National Institutes of Health will monitor the research.

Two Sears-Roebuck Foundation community medical centers were dedicated this summer in Indiana. Georgetown held its dedication on June 16. Dr. Paul E. Youngs, who occupies the building and State Senator Robert P. O'Bannon cut the ceremonial ribbon to open the facility. Roachdale celebrated their dedication on July 14, with State Senator James M. Kirtley, M.D. and State Representative Charles R. Edwards doing the honors. Dr. Robert E. Hales is establishing his practice in the clinic. These communities are the third and fourth to erect medical facilities with the help and assistance of the Sears-Roebuck Foundation. Previously Holland and Spencer have completed medical buildings on this plan.

Eli Lilly and Company have announced the release of a second periwinkle alkaloid, Oncovin (vincristine sulfate, Lilly), which has been effective in prolonging survival of children with acute leukemias. The new drug is recommended for use in cases in which other drugs have become ineffective. Lilly's first periwinkle derivative (Velban) is useful in the treatment of generalized Hodgkin's disease and choriocarcinoma. Some 40 alkaloids have been obtained from the periwinkle plant. Oncovin is present in such small amounts that its extraction and purification is a long and expensive process. Because of the high processing costs, Lilly is introducing it at a price which will yield no profit. The most troublesome side effects are neuromuscular disturbances, which limit the dosage to a greater extent than the effects on the bone marrow. ◄

About Our Cover

The high spot of the Association year is rapidly approaching and this issue of *The Journal* brings you all the details of the forthcoming 114th ISMA convention. It will enable you to plan ahead which meetings and programs you wish to attend and also gives you a preview of the fine array of scientific and technical exhibits that have been assembled to show you what is new in medicine.

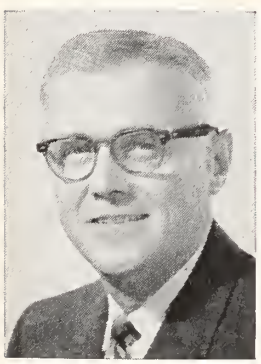
For those members who have not yet had the opportunity to visit the new Headquarters building here at 3935 North Meridian Street, may we suggest that you plan to make good that omission during the time you are in the city. Members of the ISMA staff will be working at the Headquarters during the convention and will be delighted to give the "guided tour."

There will be room for everybody's hat at the 114th convention and even if you should be hatless, do plan to be in Indianapolis on October 14-17th, 1963!—M.E.R.

President's Page

THE AMA AND VOLUNTARY HEALTH AGENCIES

Funds controlled by voluntary health agencies have become big business. Today there are more than 100,000 national, regional and local voluntary agencies soliciting contributions from the general public in the field of health and allied programs. Between 1940 and 1958, contributions to these agencies increased seven fold, from 188 million to 1½ billion. This is exceeded only by the funds available in the health field from governmental sources and from the health insurance field. It can easily be seen that funds of this magnitude represent considerable power in the health field.



Six years ago the AMA published a "Handbook for Medical Societies and Individual Physicians on Voluntary Health Agencies" which pointed out that these agencies were objects for medical society consideration. It suggested evaluation by the societies as to the relation of the local agency to a similar state or national agency, who started it and why, what are the purposes, does the agency comply in its drives with the "Principles of Fund Raising" formulated by the National Social Welfare Assembly, is the fund goal realistic when related to community needs, is the cost of fund raising and administration realistic, is the program medically correct, can the expenditures for research be justified, are expenditures for service related to needs, and does the agency use the "Accounting and Reporting Procedures" of the National Health Council? During the past four years, the Indiana State Medical Association Commission on Voluntary Health Agencies has worked diligently in a friendly evaluation of those agencies active in our state. This has been of considerable value to the citizenry of our state and to the medical profession, and for the most part has been welcomed by the agencies concerned.

It became apparent as the work progressed that similar evaluations were necessary from a national standpoint to resolve some conflicts which arose from a state body dealing with a national organization. Accordingly a resolution was presented from this state last fall to the House of Delegates of the AMA asking for a study and recommendations from the appropriate body at the AMA level. We ordinarily look to the AMA for information, leadership, guidance and support if indicated and justified. The matter was referred to the AMA Committee on Voluntary Health Agencies, which reported to the Board of Trustees "that any action taken on this resolution would put the AMA in an ambiguous position. This means that the committee would be evaluating not only the medical programs of these agencies but also their administration, fund raising and personnel practices. This type of activity would lead the AMA into a large scale accreditation program which would be costly, present legal problems, and duplicate the efforts of national accrediting agencies."

We would like to ask at this point: Who and where are these national accrediting agencies?

The committee concluded its report with the statement "That the AMA maintains its policy of neither approving nor disapproving national voluntary health agencies" and "that the AMA, through its Committee on Voluntary Health Agencies, maintains its position offering guidance on medical aspects of national voluntary health agency programs." Further, the committee asked approval of a list of suggested mutual obligations between the AMA and the voluntary health agencies.

Following are quotes from the AMA literature: "Each agency strives for medical approval and wants to count physicians among its members. Since the community looks to physicians for *endorsement* of a health agency, the physician is obligated to speak well of an agency whenever possible."

The committee has listed the following mutual obligations:

a. Liaison should be maintained at the national level so that problems concerning medical relationships can be resolved to the satisfaction of all parties concerned.

b. When a national voluntary health agency expands, alters, or changes its medical program, the advice of physicians should be sought. (This raises the question of what physicians, and how can this be enforced if there is not some sort of accreditation).

c. There should be cooperative program planning in terms of national needs and joint evaluation of accomplishments in relation to the medical aspects of the agencies program and operation. (How is this to be accomplished?)

d. There should be a mutual exchange of information and opinion enabling the medical profession and the agency to understand each others policy and practice.

e. A national voluntary health agency should seek the advice of the medical profession when embarking on a national medical program. (How is this to be accomplished and what kind of follow-up will have to be done to see if appropriate advice is accepted and followed?).

f. National medical advisory committees of voluntary health agencies should avail themselves of the opportunity to consult with organized medicine on matters relating to medical and health problems.

g. The national medical advisory committees of voluntary health agencies should be aware of the responsibility vested in them and, where problems exist, seek the counsel of their professional colleagues. (How could we be sure that this would be done?)

h. The national medical advisory committees of voluntary health agencies should have representation on the governing board of the national body and have a voice in policy formulation.

i. The national voluntary health agencies should seek physician representation for their governing bodies, since by definition they are concerned with health matters.

The foregoing statement of mutual obligations is fine, but the big question is, how can the AMA implement this? From where I sit, the only answer is some program of approval or accreditation, and it need not be unduly expensive. It seems to me that it would be an excellent public service and in keeping with the highest traditions of American Medicine.

This whole matter was presented to the Board of Trustees of the AMA who returned it to the committee with the recommendation that it be given further study. It will be the subject of discussion at the forthcoming AMA Institute. Those of you who are interested might discuss this with your delegates to the AMA or if you have any constructive ideas, please write to the Board of Trustees. It seems to me that if this type of activity is recommended by the AMA for local and state societies, it would be a worthwhile endeavor for our national organization.

Maurice E. Glocke

The Woman's Auxiliary

REPORTS TO ISMA

Thirty-five years ago September 26th, the one-year-old Woman's Auxiliary to the Indiana State Medical Association held its first state convention meeting in the Gary Hotel, Gary, Indiana. After reading the report of that first year's activities, I realized how proud we should be of our heritage. The growth and progress of the auxiliary is due to the solid foundation and foresight initiated by those dedicated women.



The framework of the auxiliary has expanded with our progress. From one committee, Hygeia, established 35 years ago, we now have our committee structure grouped into three categories:

(1) To operate efficiently, we have our bylaws, finance, *Hoosier Doctor's Wife* publication, reports, history and parliamentary procedure.

(2) To prepare ourselves to speak for medicine with knowledge and conviction through programming we have committees on membership, bulletin circulation, AMA-ERF and legislation.

(3) To prove medicine's concern for the welfare of the community through community service, we have committees on civil defense, health careers, mental health, rural health, safety, medical care insurance and international health activities.

Our second program for the auxiliary year will be the state convention. Mrs. Glen V. Ryan and Mrs. John M. Nohl, co-chairmen of women's activities for the convention, have completed plans for the program. All doctor's wives are invited and urged to attend the dinner, honoring past presidents on Tuesday, October 15th, the board of directors and general assembly meeting on Wednesday, October 16th at 9:30 a.m. and the luncheon at 1:00 p.m.

The meetings are planned to be entertaining and informative and we are anticipating a large attendance.

Zelda K. Sullivan

114th
Annual Convention

INDIANA STATE MEDICAL ASSOCIATION

October 14, 15, 16 and 17, 1963

All Events on Eastern Standard Time

Murat Temple, Indianapolis, Indiana

Complete Program and Annual Reports on Following Pages

Official Call to the House of Delegates

The next annual session of the Indiana State Medical Association will be held at the Murat Temple, Indianapolis, Indiana, October 14, 15, 16 and 17, 1963.

The House of Delegates will be constituted as follows: Marion County, 21 delegates; Lake County, nine delegates; Allen, St. Joseph, and Vanderburgh County societies, each five delegates; Delaware-Blackford, three delegates; Bartholomew-Brown, Daviess-Martin, Dearborn-Ohio, Elkhart, Fayette-Franklin, Fountain-Warren, Harrison-Crawford, Jackson-Jennings, Jefferson-Switzerland, LaPorte, Madison, Owen-Monroe, Parke-Vermillion, Tippecanoe, Vigo and Wayne-Union County Societies, each two delegates; the other 58 county societies, each one delegate; 13 councilors and the ex-presidents, namely George R. Daniels, F. S. Crockett, Herman M. Baker, Karl R. Ruddell, M. A. Austin, Augustus P. Hauss, Paul D. Crimm, W. Harry Howard, Walter U. Kennedy, Elton R. Clarke, M. C. Topping, Kenneth L. Olson, Earl W. Mericle, and Guy A. Owsley, and ex-officio, the president, president-elect, executive secretary and the treasurer of the association, and the delegates to the American Medical Association, all without power to vote, except in the case of a tie vote, when the president shall cast the deciding vote.

Blank credentials have been sent by the secretary to each county society, and the properly executed credentials should be mailed to the Indiana State Medical Association, 3935 N. Meridian Street, Indianapolis 8, Indiana, or brought to the session. No delegate will be seated unless wearing the official badge.

The House of Delegates will convene promptly at 3:00 p.m. Monday, October 14, 1963 in the Ballroom, Columbia Club, for the first meeting. The order of business at the first meeting will be as follows:

1. Call to order by the president.
2. Roll call and seating of qualified delegates.
3. Tribute to members of House who have died since the 1962 session.
4. Reading of the minutes of previous meetings.
5. Introduction of guests.
6. Appointment of Reference Committees and assignment of meeting rooms.
7. Unfinished business.
8. Address of president-elect.
9. Report of President of the Woman's Auxiliary.
10. Report of Indiana Chapter Student AMA.
11. Report by president of Blue Shield.
12. Report of executive secretary.
13. Report of treasurer.
14. Report of the chairman of the Council.
15. Reports of councilors.
16. Report of *Journal* Editor.
17. Reports of committees and commissions:

 COMMITTEES:

 (1) Executive
 (2) Grievance
 (3) Student Loan
 (4) Medical-Legal Review

 COMMISSIONS:

 (1) Convention Arrangements
 (2) Constitution and Bylaws
 (3) Legislation
 (4) Public Information
 (5) Governmental Medical Services
 (6) Public Health
 (7) Voluntary Health Agencies
 (8) Medical Economics and Insurance
 (9) Inter-Professional Relations
 (10) Medical Education and Licensure
 (11) Special Activities
 (12) Aging

18. New Business.

 (1) Resolutions from the floor.

The second meeting will be held at 2:00 p.m., Tuesday, October 15, 1963, in the Ballroom, Columbia Club, for the purpose of hearing and acting upon reports of the Reference Committees.

The final meeting of the House, at which time the first order of business will be the election of officers, will be held at 3:00 p.m., Thursday, October 17, 1963, in the Candidates Room, Murat Temple.

In addition to the regular officers, the terms of the following officers expire December 31, 1963, and their successors must be elected at the session: Delegates to the American Medical Association to succeed Walter L. Portteus, M.D., Franklin, and Jack E. Shields, M.D., Brownstown, and alternates, William B. Challman, M.D., Mount Vernon, and John M. Paris, M.D., New Albany.

Delegates from the Second, Fifth, Eighth, and Eleventh districts are reminded that the terms of their councilors will expire October 17, 1963, and new councilors should be elected to succeed the following:

Second District—E. T. Edwards, Vincennes
Fifth District—V. Earle Wiseman, Greencastle
Eighth District—Gordon B. Wilder, Anderson
Eleventh District—E. S. Rifner, VanBuren

Some of these elections already may have been held, but they should be reported to the House of Delegates at this session for confirmation.

JAMES A. WAGGENER, *Executive Secretary*

HOUSE OF DELEGATES

Indiana State Medical Association

Indianapolis—October 14, 15, 16 and 17, 1963

County and Delegates	Alternates
ADAMS	
C. William Freeby, Decatur	Howard M. Luginbill, Berne
ALLEN	
Franklin A. Byran, Fort Wayne	James C. Graham, Fort Wayne
J. Robert Ball, Fort Wayne	Walter T. Jurgensen, Fort Wayne
Richard B. Juergens, Fort Wayne	Gerald R. Nolan, Fort Wayne
Eugene F. Senseny, Fort Wayne	Robert L. Hillery, Fort Wayne
Robert E. Sullivan, Fort Wayne	John E. Krueger, Fort Wayne
BARTHOLOMEW-BROWN	
L. L. Gammell, Columbus	A. L. Henry, Columbus
Robert Seibel, Nashville	Kenneth Schneider, Nashville
BENTON	
Donald McKinney, Otterbein	
BOONE	
C. G. Kern, Lebanon	Don Boyer, Lebanon
CARROLL	
T. Neal Petry, Delphi	George W. Wagoner, Delphi
CASS	
Earl W. Bailey, Logansport	Donald K. Winter, Logansport
CLARK	
Eli Goodman, Charlestown	J. T. Carney, Jeffersonville
CLAY	
J. F. Maurer, Brazil	
CLINTON	
Robert A. Hedgcock, Frankfort	
DAVIESS-MARTIN	
C. Philip Fox, Washington	Robert H. Rang, Washington
E. B. Lett, Loogootee	Robert Chattin, Loogootee
DEARBORN-OHIO	
Leslie M. Baker, Aurora	Ivan Lindgren, Lawrenceburg
Gordon S. Fessler, Rising Sun	
DECATUR	
William Shaffer, Greensburg	Robert Acher, Greensburg
DE KALB	
Floyd Coleman, Waterloo	John H. Hines, Auburn
DELAWARE-BLACKFORD	
Thomas M. Brown, Muncie	Donald R. Taylor, Muncie
Glynn A. Rivers, Muncie	Warren L. Bergwall, Muncie
Dean Jackson, Hartford City	Edward D. Wierzalis, Hartford City
DUBOIS	
John H. Barrow, Dale	Edward Ploetner, Jasper
ELKHART	
Carlos Mendez, Elkhart	E. G. Dovey, Elkhart
J. P. Turner, Goshen	Thomas J. Quilty, Goshen
FAYETTE-FRANKLIN	
G. T. Watterson, Connersville	W. F. Kerrigan, Connersville
H. N. Smith, Brookville	Perry F. Seal, Brookville
FLOYD	
Donald R. LaFollette, New Albany	Kenneth H. Brown, New Albany
FOUNTAIN-WARREN	
Peter R. Petrich, Attica	Lowell R. Stephens, Covington
James W. Crain, Williamsport	Carl A. Nelson, West Lebanon
FULTON	
Dean K. Stinson, Rochester	C. L. Richardson, Rochester
GIBSON	
R. S. McElroy, Princeton	Virgil McCarty, Princeton
GRANT	
Robert M. Brown, Marion	William A. Roll, Marion
GREENE	
Sam Rotman, Jasonville	Jerome Graf, Bloomfield
HAMILTON	
Joe R. Lloyd, Noblesville	Alton Ridgway, Lapel
HANCOCK	
Wayne H. Endicott, Greenfield	John H. Smith, Greenfield
HARRISON-CRAWFORD	
David Dukes, Corydon	Richard Jordan, Corydon
Novy E. Gobbel, English	Jesse C. Benz, Marengo
HENDRICKS	
O. T. Scamahorn, Pittsboro	Irving Cohen, Plainfield

County and Delegates	Alternates
HENRY	
William S. Robertson, Spiceland	J. E. Fisher, New Castle
HOWARD	
Garvey G. Bowers, Kokomo	Frederick C. Schwartz, Kokomo
HUNTINGTON	
Richard W. Wagner, Huntington	Joseph Clark, Huntington
JACKSON-JENNINGS	
Harry Baxter, Seymour	John Ripley, Seymour
F. D. Ellis, North Vernon	S. B. Berkshire, North Vernon
JASPER	
Kenneth R. Ockerman, Rensselaer	Francis E. O'Brien, Rensselaer
JAY	
William Cripe, Portland	Forrest E. Keeling, Portland
JEFFERSON-SWITZERLAND	
Francis Prenatt, Madison	George A. May, Madison
Noel Graves, Vevay	Antha Hamilton, Vevay
JOHNSON	
Joseph F. Ferrara, Franklin	Joseph Young, Greenwood
KNOX	
V. C. McMahan, Vincennes	
KOSCIUSKO	
William J. Cron, Warsaw	John E. Arford, Warsaw
LA GRANGE	
Kenneth M. Lehman, Topeka	
LAKE	
M. B. Gevirtz, Hammond	N. Egnatz, Hammond
Michael Shellhouse, Gary	D. T. Ramker, Hammond
Thomas C. Tyrrell, Calumet City, Illinois	J. B. Burcham, Gary
Philip Rosenbloom, Gary	J. J. Reed, Hobart
J. B. Nicosia, East Chicago	Samuel Brady, Gary
J. P. Birdzell, Crown Point	Walfred Nelson, Gary
H. W. Eggers, Hammond	
T. J. Smith, Whiting	
J. W. Mather, East Gary	
LA PORTE	
G. O. Larson, LaPorte	J. C. Richter, LaPorte
T. D. Armstrong, Michigan City	Gene R. Hay, Michigan City

County and Delegates	Alternates
LAWRENCE	
G. E. Kasting, Bedford	
MADISON	
J. L. Larmore, Anderson	W. A. Laudeman, Elwood
P. T. Lamey, Anderson	S. W. Ellis, Anderson
MARION	
Lester H. Hoyt, Indianapolis	Roy A. Geider, Indianapolis
James H. Gosman, Indianapolis	Raleigh E. Lingeman, Indianapolis
John W. Beeler, Indianapolis	Paul A. Littlefield, Indianapolis
Floyd A. Boyer, Indianapolis	Loren H. Martin, Indianapolis
William N. Ellis, Indianapolis	B. L. Martz, Indianapolis
Robert A. Garrett, Indianapolis	Dennis Nicholas, Indianapolis
Earl J. O'Brian, Indianapolis	Malcolm L. Wrege, Indianapolis
Wayne H. Thompson, Indianapolis	John M. Young, Indianapolis
Albert M. Donato, Indianapolis	Richard A. Brickley, Indianapolis
Myron H. Nourse, Indianapolis	Joseph M. Daly, Indianapolis
Ottis N. Olvey, Indianapolis	Paul V. Evans, Indianapolis
Harry Pandolfo, Indianapolis	Hugh Williams, Indianapolis
A. T. Stone, Indianapolis	Charles Y. Knowles, Indianapolis
Ray Tharpe, Indianapolis	I. E. Michael, Indianapolis
Howard S. Williams, Indianapolis	Bertram S. Roth, Indianapolis
Evart M. Beck, Indianapolis	Theodore R. LeMaster, Indianapolis
John O. Butler, Indianapolis	B. T. Maxam, Indianapolis
David Hadley, Indianapolis	Lewis E. Morrison, Indianapolis
James M. Leffel, Indianapolis	Robert F. Nagan, Indianapolis
William B. Lybrook, Indianapolis	Donald M. Schlegel, Indianapolis
Donald E. Stephens, Indianapolis	E. Paul Tischer Indianapolis
MARSHALL	
Russell R. Hippensteel, Culver	Donald Reed, Culver
MIAMI	
Lloyd Hill, Peru	James U. Guthrie, Peru

County and Delegates	Alternates
MONTGOMERY	
Richard R. Eggers, Crawfordsville	Fred N. Daugherty, Crawfordsville
MORGAN	
Kenneth E. Comer, Mooresville	
NEWTON	
R. S. Yegerlehner, Kentland	
NOBLE	
Robert Bryan, Kendallville	Donald J. Hooker, Ligonier
ORANGE	
P. T. Hodgin, Orleans	C. X. McCalla, Paoli
OWEN-MONROE	
Paul Wenzler, Bloomington	Joseph Milan, Bloomington
Fred Smith, Spencer	Oran Kay, Spencer
PARKE-VERMILLION	
Robert M. Fell, Rosedale	Richard S. Bloomer, Rockville
Ivan L. Gailey, Clinton	Lawrence C. Webb, Dana
PERRY	
Fred Smith, Tell City	John M. James, Tell City
PIKE	
Milton Omstead, Petersburg	
PORTER	
J. R. Frank, Valparaiso	Ralph C. Eades, Valparaiso
POSEY	
Frank W. Oliphant, Mt. Vernon	Carroll Boyle, Poseyville
PULASKI	
William Thompson, Winamac	Henry R. Eshelman, Monterey
PUTNAM	
Dick J. Steele, Greencastle	Lawrence W. Jones, Greencastle
RANDOLPH	
Lowell Painter, Winchester	
RIPLEY	
Bill E. Freeland, Batesville	
RUSH	
Frank Green, Rushville	
ST. JOSEPH	
Wallace D. Buchanan, South Bend	R. E. Nelson, South Bend
M. D. Whitlock, Mishawaka	S. R. Phelps, South Bend
N. D. Sisson, South Bend	J. O. Hildebrand, South Bend
L. C. Bixler, South Bend	Jacob Rosenwasser, Mishawaka
S. E. Bechtold, South Bend	N. C. Johns, South Bend
SCOTT	
Marvin L. McClain, Scottsburg	Carl Bogardus, Austin
SHELBY	
Paul R. Tindall, Shelbyville	W. L. Dalton, Shelbyville
SPENCER	
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STARKE	
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STEUBEN	
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TIPPECANOE	
Ramon Dubois, Lafayette	
Forrest J. Babb, Lafayette	
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R. Case Hammond, Evansville	William D. Ritchie, Evansville
John H. Sterne, Evansville	George W. Willison, Evansville
John D. Wilson, Evansville	Robert C. Ziss, Evansville
VIGO	
Stuart R. Combs, Terre Haute	James V. White, Terre Haute
R. Shirrell Rogers, West Terre Haute	Thomas V. Conway, Terre Haute
WABASH	
William Dannacher, Wabash	
WARRICK	
W. C. Stover, Boonville	Robert C. Colvin, Newburgh
WASHINGTON	
Roy L. Fultz, Salem	Charles B. Carty, Pekin
WAYNE-UNION	
Glen Ward Lee, Richmond	Tom S. Shields, Brownstown
Clarence G. Clarkson, Liberty	James F. Lewis, Liberty
WELLS	
Truman E. Caylor, Bluffton	Pierre C. Talbert, Bluffton
WHITE	
J. P. Galbreath, Burnettsville	N. A. Hibner, Monticello
WHITLEY	
Thomas Hamilton, Columbia City	C. Jules Heritier, Columbia City

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AMA DELEGATES

Harold C. Ochsner, Indianapolis
E. S. Jones, Hammond
Francis L. Land, Fort Wayne
Walter L. Portteus, Franklin (deceased)
Jack E. Shields, Brownstown

Fifty-Year Club—1963

ALLEN
Edgar N. Mendenhall, M.D., Fort Wayne
George E. Moats, M.D., Fort Wayne
Elmer C. Singer, M.D., Fort Wayne

DEKALB
Bonnell M. Souder, M.D., Auburn

DELAWARE-BLACKFORD
Leslie E. Werry, M.D., Hartford City

ELKHART
Lloyd H. Simmons, M.D., Goshen

HARRISON-CRAWFORD
Jesse C. Benz, M.D., Marengo

HENRY
George E. Iterman, M.D., New Castle

LAKE
Desmond F. McGuire, M.D., East Chicago

MADISON
Harry W. Fitzpatrick, M.D., Elwood

MARION
Herman H. Gick, M.D., Indianapolis
Frank L. Jennings, M.D., Indianapolis
Walter B. Tinsley, Sr., M.D., Indianapolis

MARSHALL
Frank H. Kelly, M.D., Argos

NOBLE
Richard R. Gutstein, M.D., Kendallville
Isaac H. Lawson, M.D., Kendallville

PORTER
Francis J. Kleinman, M.D., Hebron

PULASKI
Thomas E. Carneal, M.D., Winamac

ST. JOSEPH
Clifford F. Bussard, M.D., South Bend
Harry W. Helmen, M.D., Rolling Prairie

STEUBEN
Don F. Cameron, M.D., Angola

TIPPECANOE
Clyde R. Netherton, M.D., Chalmers

VIGO
Frank E. Sayers, M.D., Terre Haute

WABASH
James G. Kidd, M.D., Roann
James L. Walker, M.D., LaFontaine

WARRICK
Paul E. Wilson, M.D., Boonville

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SECTIONS AND SECTION WORK:
Howard S. Williams, Indianapolis (Marion), *Chairman*
Michael Shellhouse, Gary (Lake)
Gordon S. Fessler, Rising Sun (Dearborn-Ohio)
Earl W. Bailey, Logansport (Cass)
William R. Shaffer, Greensburg (Decatur)

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Lowell W. Painter, Winchester (Randolph), *Chairman*
Thomas M. Brown, Muncie (Delaware-Blackford)
Robert S. McElroy, Princeton (Gibson)
Forrest D. Ellis, North Vernon (Jackson-Jennings)
Theodore J. Smith, Whiting (Lake)

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James W. Denny, Indianapolis (Marion)
Francis L. Land, Fort Wayne (Allen)
Stuart R. Combs, Terre Haute (Vigo)
Robert M. Seibel, Nashville (Bartholomew-Brown)

LEGISLATION:
Truman E. Caylor, Bluffton (Wells), *Chairman*
Bill E. Freeland, Batesville (Ripley)
Otis R. Bowen, Bremen (Marshall)
Richard B. Juergens, Fort Wayne (Allen)
Donald R. LaFollette, New Albany (Floyd)

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Wendell C. Stover, Boonville (Warrick), *Chairman*
Lloyd L. Hill, Peru (Miami)
J. Robert Ball, Fort Wayne (Allen)
Thomas D. Armstrong, Michigan City (LaPorte)

HYGIENE AND PUBLIC HEALTH:
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Philip J. Rosenbloom, Gary (Lake)
Joseph F. Ferrara, Franklin (Johnson)
Milton H. Omstead, Petersburg (Pike)
Harry R. Baxter, Seymour (Jackson-Jennings)

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Guy A. Owsley, Hartford City (Delaware-Blackford), *Chairman*
M. C. Topping, Terre Haute (Vigo)
Kenneth L. Olson, South Bend (St. Joseph)
Paul D. Crimm, Evansville (Vanderburgh)
Karl R. Ruddell, Indianapolis (Marion)

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David Hadley, Indianapolis (Marion)
Leslie M. Baker, Aurora (Dearborn-Ohio)
Fred Smith, Jr., Tell City (Perry)

CREDENTIALS:
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Louis C. Bixler, South Bend (St. Joseph)
C. Philip Fox, Washington (Daviess-Martin)
Myron H. Nourse, Indianapolis (Marion)
Dean K. Stinson, Rochester (Fulton)

INSURANCE:
Floyd A. Boyer, Indianapolis (Marion), *Chairman*
Wemple Dodds, Crawfordsville, (Montgomery)
R. Case Hammond, Evansville (Vanderburgh)
Peter R. Petrich, Attica (Fountain-Warren)
John W. Beeler, Indianapolis (Marion)

MISCELLANEOUS BUSINESS:
Guy B. Ingwell, Knox (Starke), *Chairman*
S. E. Bechtold, South Bend (St. Joseph)
Richard Wagner, Huntington (Huntington)
James M. Leffel, Indianapolis (Marion)
Frank H. Green, Rushville (Rush)

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1962-1963
Officers of the ISMA

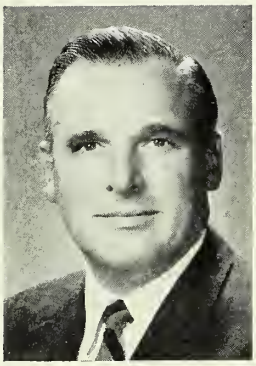


MAURICE E. GLOCK, M.D.

President

Indiana State Medical Association

1962-63



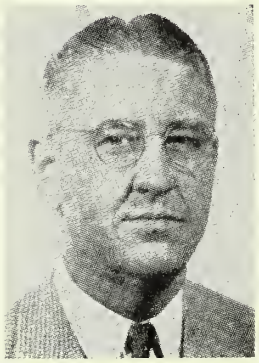
DON E. WOOD, M.D.
President-Elect
Indianapolis



IRVIN W. WILKENS, M.D.
Treasurer
Indianapolis



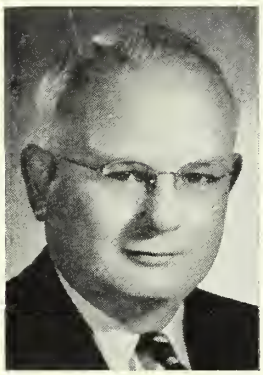
JAMES A. WAGGENER
Executive Secretary
Indianapolis



KENNETH O. NEUMANN, M.D.
Chairman of Council
Lafayette



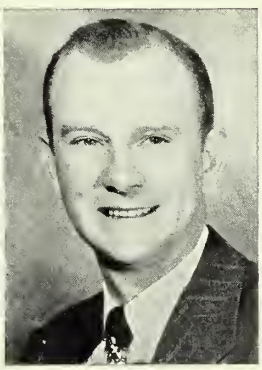
WENDELL E. COVALT, M.D.
Chairman
Executive Committee
Muncie



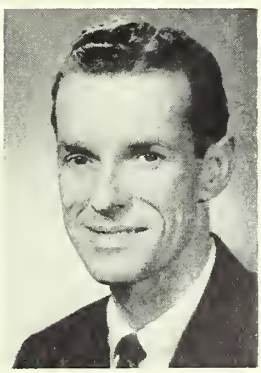
RALPH V. EVERLY
Executive Committee
Indianapolis



MRS. JOHN M. SULLIVAN
President, Auxiliary
Terre Haute



ROBERT J. AMICK
Field Secretary
Scottsburg



HOWARD GRINDSTAFF
Field Secretary
Indianapolis

The Journal



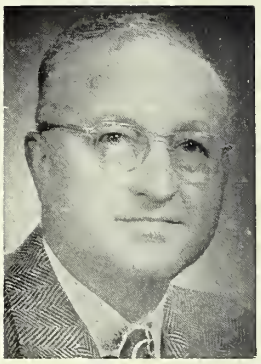
FRANK B. RAMSEY, M.D.
Editor
Indianapolis



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Associate Editor
Terre Haute



L. G. MONTGOMERY, M.D.
Associate Editor
Muncie



DAVID A. BICKEL, M.D.
Associate Editor
South Bend



STEPHEN L. JOHNSON, M.D.
Associate Editor
Evansville



GEORGE M. JOHNSON, M.D.
Editorial Board
Richmond



IRVIN W. WILKENS, M.D.
Editorial Board
Indianapolis



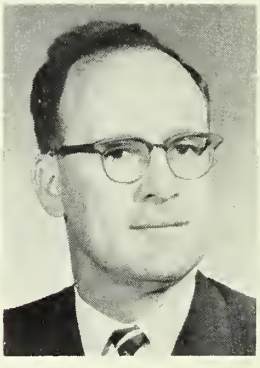
HAROLD D. LYNCH, M.D.
Editorial Board
Evansville



JENE R. BENNETT, M.D.
Editorial Board
South Bend



FRANKLIN F. PREMUDA, M.D.
Editorial Board
Hammond



ALVIN J. HALEY, M.D.
Editorial Board
Fort Wayne

Section Officers

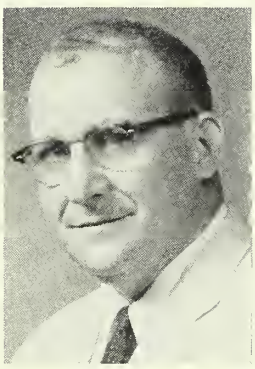
Surgery

CHAIRMEN



W. C. VON DER LIETH, M.D.
Vincennes

VICE-CHAIRMEN



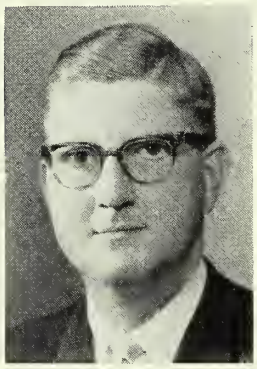
JAMES S. FITZPATRICK, M.D.
Portland

SECRETARIES

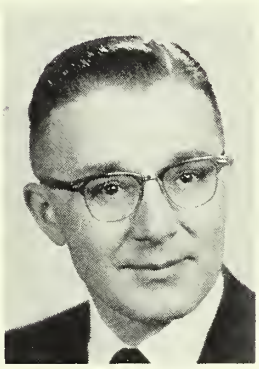


CLIFFORD A. WIETHOFF, M.D.
Seymour

Internal Medicine



LOWELL H. STEEN, M.D.
Whiting



ISAAC E. MICHAEL, M.D.
Indianapolis

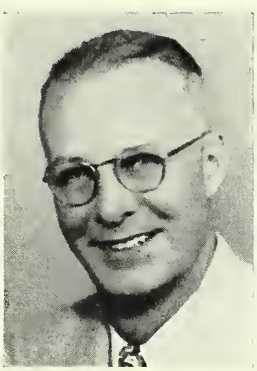


PAUL TISCHER, M.D.
Indianapolis

Ophthalmology and Otolaryngology



M. P. CUTHBERT, M.D.
Indianapolis



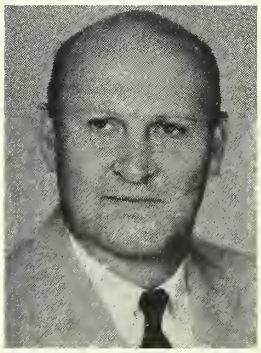
JOHN R. SWAN, M.D.
Indianapolis



M. R. HARDING, M.D.
Indianapolis

Anesthesiology

CHAIRMEN



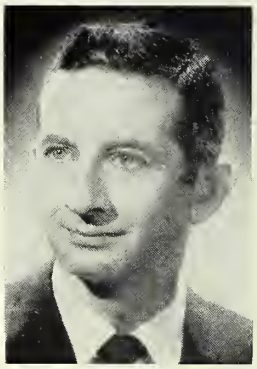
DOUGLAS J. GIORGIO, M.D.
Evansville

VICE-CHAIRMEN



MURWYN L. HICKS, M.D.
Indianapolis

SECRETARIES



CYRIL TAYLOR, M.D.
Indianapolis

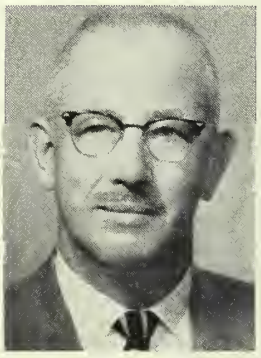
General Practice



EDWARD EDWARDS, M.D.
Vincennes

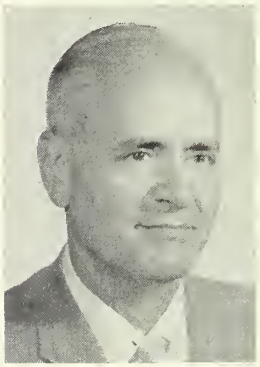


EUGENE S. RIFNER, M.D.
Van Buren

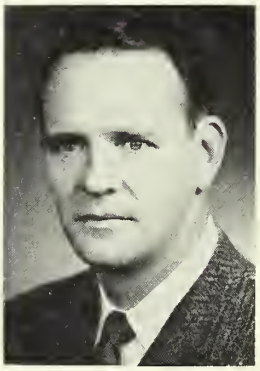


JAMES CRAIN, M.D.
Williamsport

Obstetrics and Gynecology



EDGAR L. ENGEL, M.D.
Evansville



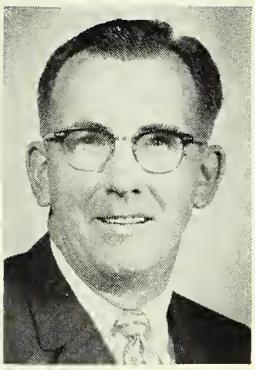
WILLIAM A. KARSELL, M.D.
Indianapolis



ELFRED H. LAMPE, M.D.
Fort Wayne

Radiology

CHAIRMEN



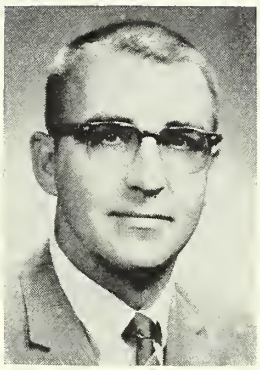
JACK LOUDERMILK, M.D.
Fort Wayne

VICE-CHAIRMEN



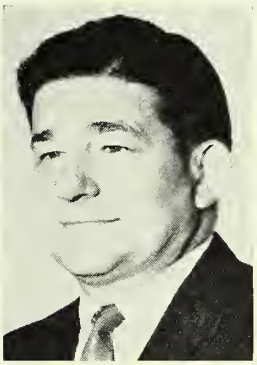
WALTER G. HUNSBERGER, M.D.
Lafayette

SECRETARIES



RICHARD A. SILVER, M.D.
Indianapolis

Public Health and Preventive Medicine



ARNOLD W. BROCKMOLE, M.D.
Evansville

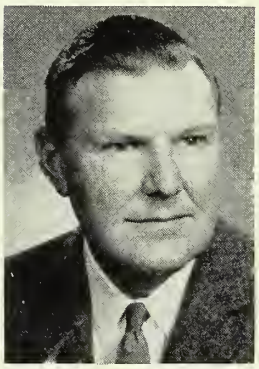


K. O. NEUMANN, M.D.
Lafayette

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JOHN E. ARFORD, M.D.
Warsaw

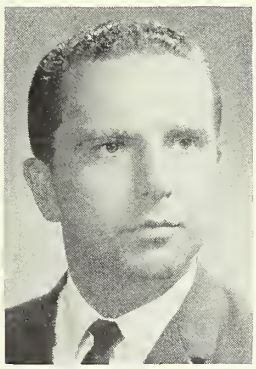
Nervous and Mental Diseases



MARVIN F. GREIBER, M.D.
Muncie

NO PICTURE AVAILABLE

JOHN U. KEATING, M.D.
Elkhart



GORDON T. BROWN, M.D.
Indianapolis

Schedule of Events

114th Annual Convention
Indiana State Medical Association
Murat Temple, Indianapolis, Indiana
October 14, 15, 16, 17, 1963

(All Events on Eastern Standard Time)

(The scientific program of the 114th annual convention of the Indiana State Medical Association is acceptable for 7½ hours of Category I credit by the American Academy of General Practice.)

Monday, October 14, 1963

10:00 a.m. Executive Committee meeting, Fairbanks Room, fourth floor, Columbia Club

12 noon Council meeting, Parlor "A", fourth floor, Columbia Club

3:00 p.m. Meeting of House of Delegates, Ballroom, Columbia Club

7:00 p.m. Reference Committee meetings, Columbia Club

Tuesday Morning, October 15, 1963

7:30 a.m. Breakfast meeting of the Council, Harrison Room, Columbia Club

8:00 a.m. Reference Committee meetings continue, Murat Temple

8:00 a.m. Annual golf tournament, Speedway Golf Course

8:30 a.m. Registration starts, lounge room, Murat Temple. Purchase your banquet tickets at the registration desk

8:30 a.m. Opening of technical and scientific exhibits, lounge room, Murat Temple

8:30 to 12 noon Tour of ISMA Headquarters Building, 3935 N. Meridian Street

9:00 a.m. Meeting of one and two-delegate counties, Candidates Room, Murat Temple

9:00 a.m. Annual trap-skeet shoot, Indiana Gun Club

9:00 a.m. Bowling tournament, The Meadows Bowl, 4046 N. Rural Street. Physicians and/or wives

11 a.m. to 1:00 p.m. Time allowed to view technical and scientific exhibits

Tuesday Noon, October 15, 1963

12 noon Luncheon meeting of past presidents of the Indiana State Medical Association, Ladies Parlors (small room), Athenaeum

12 noon Editorial Board luncheon meeting, Directors' Room, Athenaeum

12 noon Joint luncheon meeting of SECTION ON ANESTHESIOLOGY and Indiana State Society of Anesthesiologists, Ladies Parlors (large room), Athenaeum
Election of Section Officers for 1964

12 noon Luncheon meeting of SECTION ON OBSTETRICS AND GYNECOLOGY, Blue Room, Athenaeum
A general discussion of current topics of interest
Election of Section Officers for 1964

12 noon Joint luncheon meeting of SECTION ON RADIOLOGY and Indiana Roentgen Society, East Room, Athenaeum
Election of Section Officers for 1964

12 noon Indiana Association of Pathologists luncheon meeting, Fraternity Room, Athenaeum

12 noon Indiana Chapter of American College of Chest Physicians luncheon meeting, Veterans Room, Athenaeum
Speakers: DAVID LITTMANN, M.D.
Assistant Clinical Professor in Medicine, Harvard Medical School, Boston
"The Use of Coronary Arteriography"
ALBERT H. ANDREWS, JR., M.D.
Clinical Professor of Bronchoesophagology, College of Medicine, University of Illinois, Chicago, Illinois
"Bronchostasis"

SECTION MEETINGS

Section on Surgery

(Candidates Room, Murat Temple)

1:00 p.m. (1) Papers by 2 Indiana University Hospital residents

Discussion by HARRIS B. SHUMACKER, Jr., M.D., Indianapolis

(2) Papers by 2 Marion County General Hospital residents

Discussion by KINGSLEY LAWRANCE, M.D., Indianapolis

Election of Section Officers for 1964

1:00 p.m. *Section on Internal Medicine*, Dining Room, Murat Temple

Election of Section Officers for 1964

1:00 p.m. *Section on Ophthalmology and Otolaryngology*, Kneipe Room, Murat Temple

Election of Section Officers for 1964

1:00 p.m. *Section on General Practice*, Basement Foyer, Murat Temple

Election of Section Officers for 1964

1:00 p.m. *Section on Public Health and Preventive Medicine*, Foyer to Egyptian Room, Murat Temple

Election of Section Officers for 1964

2:00 p.m. Meeting of the House of Delegates, Ballroom, Columbia Club

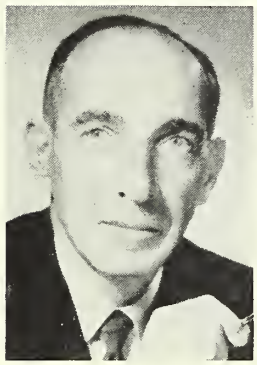
4:00 to
5:00 p.m. Time allowed to view technical and scientific exhibits

Tuesday Evening, October 15, 1963

5:00 p.m. Supper, smoker and stag party, Dining Room, Murat Temple

Presentation of sports trophies

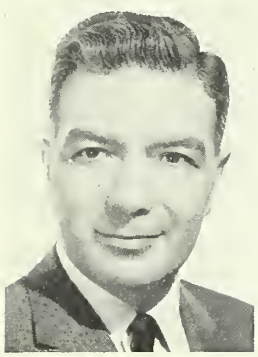
6:00 p.m. Reception and annual dinner meeting for women physicians, Parlors D and E, fifth floor, Indianapolis Athletic Club



DAVID LITTMANN, M.D.
West Roxbury, Mass.
Cardiologist, Veterans Administration Hospital, West Roxbury; Assistant Clinical Professor in Medicine, Harvard Medical School; Clinical Associate in Medicine, Massachusetts General Hospital; M.D. from Tufts School of Medicine, 1929.



ALBERT H. ANDREWS, JR., M.D.
Chicago, Illinois
Clinical Professor of Bronchoesophagology, College of Medicine, University of Illinois, Chicago, Illinois; Attending Bronchoesophagologist, Presbyterian St. Luke's Hospital, Chicago; M.D. from Northwestern University Medical School, 1933.



HARRIS B. SHUMACKER, JR., M.D.
Indianapolis
Professor and Chairman, Department of Surgery, Indiana Univ. Medical Center; Representative to Advisory Board for Medical Specialties; M.D. from Johns Hopkins Univ. School of Medicine, 1932.



KINGSLEY LAWRANCE, M.D.
Indianapolis
Staff Surgeon, Marion County General Hospital; Associate in Surgery, I. U. School of Medicine; Fellow of the Royal College of Surgeons, England; M.D. from University of London, 1946.

Fireside Conferences
on
CARDIO-RESPIRATORY DISEASES

Tuesday, October 15, 1963, 8:00 P.M.

Ballroom, Columbia Club

This is an annual feature of the convention sponsored by the Indiana State Medical Association and the Indiana Chapter of the American College of Chest Physicians for all physicians. The conferences are informal and unrehearsed, providing an opportunity for free discussion of many subjects of interest to general practitioners and specialists alike. A panel of experts will be seated at each of ten tables, and physicians are encouraged to ask questions, express their own ideas, and comment on the various problems under discussion. They may move from one table to another if and when they wish. (Complimentary refreshments will be served during the evening.)

Honored Guest Participants

DAVID LITTMANN, M.D., Assistant Clinical Professor in Medicine, Harvard Medical School; Clinical Associate in Medicine, Massachusetts General Hospital; Cardiologist, Veterans Administration Hospital, West Roxbury, Massachusetts.

ALBERT H. ANDREWS, JR., M.D., Clinical Professor of Bronchoesophagology, College of Medicine, University of Illinois, Chicago, Illinois.

1. *The Heart in Pulmonary Disease*
 Moderator: DAVID LITTMANN, M.D., West Roxbury, Massachusetts
 A. D. DENNISON, JR., M.D., Indianapolis
 EDWARD F. STEINMETZ, M.D., Indianapolis
 ALFONS LANDWEHR, M.D., Indianapolis

2. *Emphysema*
 Moderator: ALBERT ANDREWS, JR., M.D., Chicago, Illinois
 STUART BONDURANT, M.D., Indianapolis
 DONALD F. MacLEOD, M.D., West Lafayette
 ALBERT FASCOLA, M.D., Indianapolis

3. *Management of Esophageal Disease*
 Moderator: WAYNE CARSON, M.D., Indianapolis
 THOMAS W. JOHNSON, M.D., Indianapolis
 KENNETH L. OLSON, M.D., South Bend
 JOSEPH E. WALTHER, M.D., Indianapolis

4. *Cardiac Emergencies*
 Moderator: FRANCIS W. HARE, JR., M.D., Madison
 RICHARD H. JOWITT, M.D., Indianapolis
 ERICH K. LANG, M.D., Indianapolis
 MORRIS E. THOMAS, M.D., Indianapolis

5. *Thoracic Emergencies*
 Moderator: JOHN V. THOMPSON, M.D., Indianapolis
 EDWIN R. EATON, M.D., Indianapolis
 LOWELL H. STEEN, M.D., Whiting
 GALE DRYDEN, M.D., Indianapolis

6. *X-Ray Therapy of Thoracic Problems*
 Moderator: JAMES C. KATTERJOHN, M.D., Indianapolis
 DONALD W. BRODIE, M.D., Indianapolis
 DAVID C. GASTINEAU, M.D., Fort Wayne
 KINGSLEY LAWRANCE, M.D., Indianapolis

7. *Diagnosis and Management of Pericarditis*
 Moderator: RICHARD M. NAY, M.D., Indianapolis
 PASQUALE D. GENOVESE, M.D., Indianapolis
 WILLIAM E. VanFLEIT, M.D., South Bend
 ARVINE G. POPPLEWELL, M.D., Indianapolis

8. *Impending Myocardial Infarction*
 Moderator: ARTHUR N. FERGUSON, M.D., Fort Wayne
 HAROLD BURDETTE, M.D., Indianapolis
 DAN L. URSCHEL, M.D., Mentone
 ROBERT B. CHEVALIER, M.D., Indianapolis

9. *Differential Diagnosis of Chest Pain*
 Moderator: JAMES O. RITCHEY, M.D., Indianapolis
 BYRON C. WHEELER, M.D., Terre Haute
 ROY H. BEHNKE, M.D., Indianapolis

10. *Newer Concepts of Chemotherapy in Pulmonary Disease*
 Moderator: JOHN D. MILLER, M.D., Indianapolis
 RICHARD GRIFFITH, M.D., Indianapolis
 LESTER H. HOYT, M.D., Indianapolis

7:30 a.m. Breakfast meeting of the Council, Harrison Room, Columbia Club

8:30 a.m. Registration continues, lounge room, Murat Temple

Purchase your banquet tickets at the registration desk

8:30 a.m. Technical and scientific exhibits, lounge room, Murat Temple

8:30 to
9:00 a.m. Time allowed to view technical and scientific exhibits

9:00 to
10:00 a.m. Color TV program from I.U. Medical Center, through auspices of Smith Kline & French Laboratories, Egyptian Room

"Diagnostic Aids in Digestive Diseases"

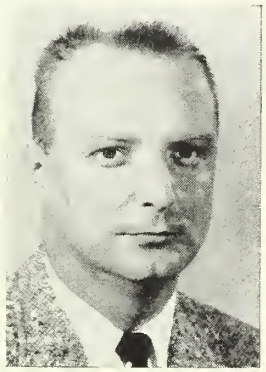
Moderator: PHILIP A. CHRISTIANSEN, M.D., Indianapolis

Participants: BERNARD D. ROSENAK, M.D., Indianapolis

JAMES R. MEADOWS, M.D., Indianapolis

STEPHEN R. STOUDER, M.D., Indianapolis.

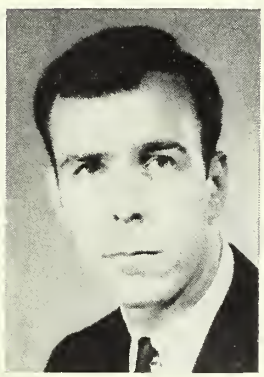
10:00 to
10:30 a.m. Time allowed to view technical and scientific exhibits



PHILIP A. CHRISTIANSEN, M.D.
Indianapolis
Associate Professor of Internal Medicine, specialist in gastroenterology; Consultant, Marion County General Hospital; M.D. from University of Texas, 1953.



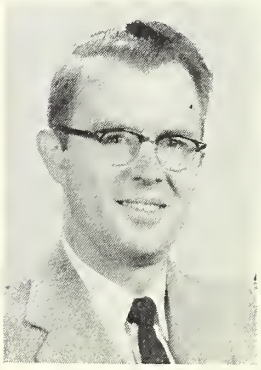
BERNARD D. ROSENAK, M.D.
Indianapolis
Clinical Professor of Medicine, Indiana University Medical Center; Specialist in gastroenterology; Consultant at V. A. Hospital, Indianapolis; M.D. from Indiana University, 1933.



JAMES R. MEADOWS, M.D.
Indianapolis
Specialist in internal medicine, gastroenterology; M.D. from Indiana University, 1959.



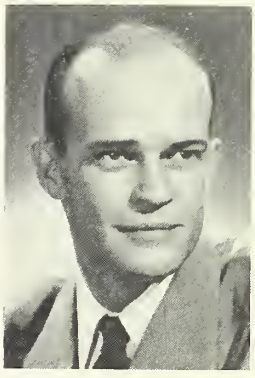
STEPHEN R. STOUDER, M.D.
Indianapolis
Specialist in internal medicine, Resident in Medicine, Indiana University Medical Center; MD., from Indiana University, 1962.



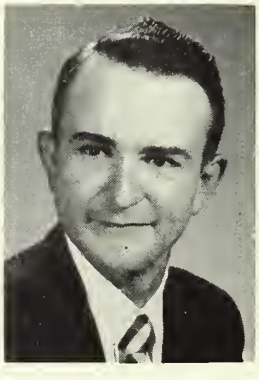
ROBERT M. PALMER, M.D.
Indianapolis
Instructor in Orthopedic Surgery, Indiana University Medical Center; M.D. from Indiana University, 1955.



GEORGE J. GARCEAU, M.D.
Indianapolis
Professor of orthopedic surgery; chairman of Orthopedic Department, I. U. School of Medicine; member of Clinical Orthopedic Society, American Academy of Orthopedic Surgeons; M.D. from Northwestern University Medical School, 1925.



K. RANDOLPH MANNING, M.D.
Indianapolis
Specialist in orthopedic surgery; Chairman, Orthopedic Surgery, Methodist Hospital; Assistant in orthopedic surgery, Indiana University Medical Center; M.D. from Northwestern University, 1943.



DONALD S. BLACKWELL, M.D.
Indianapolis
Assistant in Orthopedic Surgery, Indiana University, also in private practice; M.D. from Indiana University, 1952.

Wednesday Morning, October 16, 1963

10:30 to
11:30 a.m. Color TV program from I.U. Medical Center, through auspices of Smith Kline & French Laboratories, Egyptian Room

"Common Low Back Problems"

Moderator: ROBERT M. PALMER, M.D., Indianapolis

Participants: GEORGE J. GARCEAU, M.D., Indianapolis

K. RANDOLPH MANNING, M.D., Indianapolis

DONALD S. BLACKWELL, M.D., Indianapolis

11:30 a.m. to
12 noon Time allowed to view technical and scientific exhibits

Wednesday Noon, October 16, 1963

12 noon Joint luncheon meeting of SECTION ON NERVOUS AND MENTAL DISEASES, Indiana Neuropsychiatric Association and the Northern Indiana Psychiatric Association, East Room, Athenaeum

Election of Section Officers for 1964

12 noon Indiana State Division, International College of Surgeons luncheon meeting, Blue Room, Athenaeum

12 noon Indiana Chapter, American Academy of Pediatrics luncheon meeting

12 noon Nu Sigma Nu luncheon, Veterans Room, Athenaeum

12 noon Phi Chi luncheon, Ladies Parlors (large room), Athenaeum

12 noon Phi Beta Pi luncheon, Directors' Room, Athenaeum

1:00 p.m. Flying Physicians Association, Indiana Chapter, meeting, Basement Foyer, Murat Temple. (Not a luncheon meeting.)

1:00 p.m. Meeting of members and invited guests of the Indiana Bone and Joint Club, Fraternity Room, Athenaeum. (Not a luncheon meeting.)

GENERAL MEETING

(Egyptian Room)

Maurice E. Glock, M.D., Fort Wayne, president, Indiana State Medical Association, chairman

1:30 p.m. PROGRAM SPONSORED BY INDIANA SOCIETY OF INTERNAL MEDICINE

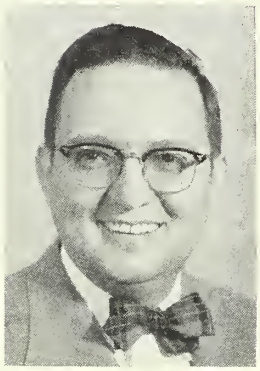
Panel discussion: "Diagnosis and Treatment of Acute Respiratory Infections"

Moderator: ROY H. BEHNKE, M.D., Indianapolis

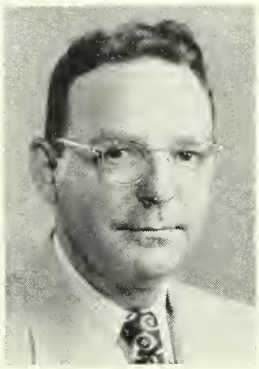
Participants: WALLACE E. HERRELL, M.D., Lexington, Kentucky

FELICE MANFREDI, M.D., Indianapolis

ALFRED S. EVANS, M.D., Madison, Wisconsin



ROY H. BEHNKE, M.D.
Indianapolis
Professor of Medicine, I. U. School of Medicine; Appointed to Editorial Board of MEDICINA THORACALIS in 1963; M.D. from I. U. School of Medicine, 1946.



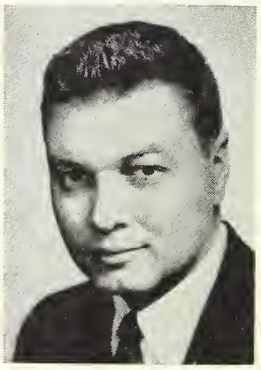
WALLACE E. HERRELL, M.D.
Lexington, Ky.
Clinical Professor of Medicine, University of Kentucky; Member of Panel of infectious diseases of the United States Pharmacopeia, M.D. from University of Virginia.



FELICE MANFREDI, M.D.
Indianapolis
Assistant Professor of Medicine, Indiana University School of Medicine; Specialist in internal medicine—pulmonary diseases; M.D. from University of Rome Medical School, Rome, Italy.



ALFRED S. EVANS, M.D.
Madison, Wisc.
Professor and Chairman, Dept. of Preventive Medicine, University of Wisconsin; Director, Wisconsin State Laboratory of Hygiene; M.D. from University of Buffalo, 1943.



LOUIS J. WEST, M.D.
Oklahoma City, Okla.
Professor and Head, Dept. of Psychiatry, Neurology and Behavorial Sciences, University of Oklahoma School of Medicine; Consultant, U.S.A.F. Aero-Space Medical Center; M.D. from University of Minnesota, 1949.

1:30 p.m. PROGRAM SPONSORED BY SECTION ON NERVOUS AND MENTAL DISEASES

(Candidates Room)

Marvin F. Greiber, M.D., Muncie
chairman, Section on Nervous and Mental Diseases, presiding

"The Influence of the Patient Upon the Physician"

LOUIS JOLYON WEST, M.D., Oklahoma City

"The Psychiatric Aspects of Convulsive Disorders"

LOUIS L. TUREEN, M.D., St. Louis



LOUIS L. TUREEN, M.D.
St. Louis, Mo.
Specialist in Neurology; Professor, Clinical Neurology and Psychiatry, St. Louis University; Consultant to V.A. Hospital, St. Louis; M.D. from Washington University School of Medicine, 1927.

3:00 to
3:30 p.m. Time allowed to view technical and scientific exhibits

GENERAL MEETING

(Egyptian Room)

Maurice E. Glock, M.D., Fort Wayne, president, Indiana State Medical Association, chairman

3:30 p.m. *"Americanism."*

"Competition for Survival"

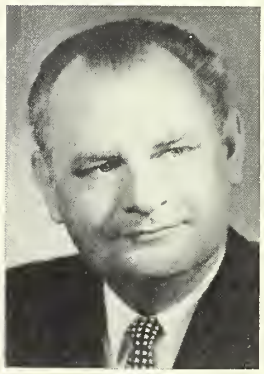
WALTER PETRAVAGE, Washington, D.C.

"Planners, Plots and Plunderers"

HON. DONALD C. BRUCE, Washington, D.C.

"It Can Happen Here"

DR. NICHOLAS NYARADI, Peoria, Illinois



WALTER PETRAVAGE
Washington, D.C.
Manager of the Public Affairs Department of the United States Chamber of Commerce, directing the chamber's program to encourage and equip individuals to participate more effectively in public affairs.



HON. DONALD C. BRUCE
Washington, D.C.
Congressman from Indiana, member of the House Education and Labor Committee and the Un-American Activities Committee, former news commentator, program director and business manager of Indianapolis radio stations.



DR. NICHOLAS NYARADI
Peoria, Ill.
Director, School of International Studies, Bradley University; Former Under Secretary of the Treasury and later Minister of Finance of the Republic of Hungary; Doctorates in Political Sciences and in Jurisprudence from the Royal Hungarian University of Budapest.

5:15 p.m. Reception for members of Fifty-Year Club, Parlors A and B, Columbia Club

Chairman: DON F. CAMERON, M.D., Angola

Wednesday Evening, October 16, 1963

6:00 p.m. Dinner, Indiana Bone and Joint Club, East Room, Athenaeum

6:00 p.m. President's reception, Columbian Room, Columbia Club

7:00 p.m. President's dinner, Ballroom, Columbia Club

Presiding officer: MAURICE E. GLOCK, M.D., President, Indiana State Medical Association

Recognition of Fifty-Year Club members

Address: NICHOLAS NYARADI, Peoria, Illinois
Subject: *"Operation Confusion."*

Presentation of plaque to MAURICE E. GLOCK, M.D., Fort Wayne, president 1963, by DONALD E. WOOD, M.D., Indianapolis, president 1964

Thursday Morning, October 17, 1963

7:30 a.m. Breakfast meeting of the Council, Harrison Room, Columbia Club

8:30 a.m. Registration continues, lounge room, Murat Temple

8:30 a.m. Technical and scientific exhibits, lounge room, Murat Temple

8:30 to 9:00 a.m. Time allowed to view technical and scientific exhibits

9:00 to 10:00 a.m. Color TV program from I.U. Medical Center, through auspices of Smith Kline & French Laboratories, Egyptian Room

"Neurological Examination"

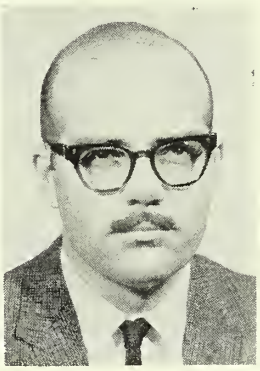
Moderator: PHILIP T. WHITE, M.D., Indianapolis

Participant: MARK L. DYKEN, M.D., Indianapolis

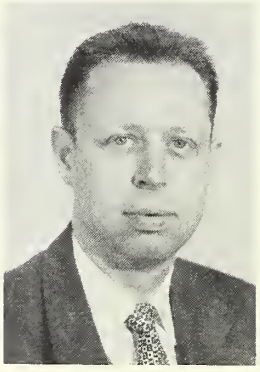
SPEAKERS



PHILIP T. WHITE, M.D.
Indianapolis
Professor of Neurology, Indiana University School of Medicine; M.D. from George Washington University, 1946.



MARK L. DYKEN, JR., M.D.
Indianapolis
Assistant Professor of Neurology, I.U. School of Medicine; Consultant, V.A. Hospitals in Indianapolis and Danville; M.D. from Indiana University, 1954.



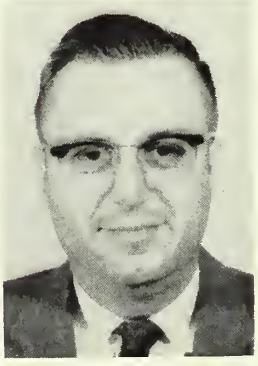
GEORGE T. LUKEMEYER, M.D.
Indianapolis
Associate Professor of Medicine, Indiana University School of Medicine; Specialist in internal medicine; M.D. from I. U. School of Medicine, 1947.



WILLIAM E. SEGAR, M.D.
Indianapolis
Specialist in Pediatrics; Member of the faculty, I.U. School of Medicine; Consultant, Marion County General Hospital; M.D. from Indiana University, 1947.



WILLIAM R. CLARK, JR., M.D.
Indianapolis
Chief Resident in Internal Medicine, Veterans Administration Hospital, Indianapolis; M.D. from Indiana University, 1960.



B. L. MARTZ, M.D.
Indianapolis
Associate Professor of Medicine, I.U. School of Medicine; Director, Lilly Laboratory for Clinical Research, Marion County General Hospital, Past President, Indiana Heart Assn.; M.D. from Indiana University, 1945.

Thursday Morning, October 17, 1963

10:00 a.m. Organization meetings of 1963-64 commission and committee members of the Indiana State Medical Association, Candidates Room, Murat Temple

10:00 to
10:30 a.m. Time allowed to view technical and scientific exhibits

10:30 to
11:30 a.m. Color TV program from I.U. Medical Center, through auspices of Smith Kline & French Laboratories, Egyptian Room

"Dialysis: Artificial Kidney and Intermittent Peritoneal Dialysis,"

Moderator: GEORGE T. LUKEMEYER, M.D., Indianapolis

Participants: WILLIAM E. SEGAR, M.D., Indianapolis

WILLIAM R. CLARK, Jr., M.D., Indianapolis

B. L. MARTZ, M.D., Indianapolis

11:30 to
12 noon Time allowed to view technical and scientific exhibits

Thursday Noon, October 17, 1963

12 noon Phi Rho Sigma luncheon, Veterans Room, Athenaeum

GENERAL MEETING

(Egyptian Room)

Maurice E. Glock, M.D., Fort Wayne, president, Indiana State Medical Association, chairman

1:00 p.m. *Panel discussion: "Chemotherapy of Cancer"*

Moderator: ROBERT J. ROHN, M.D., Indianapolis

"Present and Future Trends in the Development of Chemotherapeutic Agents for the Treatment of Malignancies"

T. PHILLIP WAALKES, M.D., Washington, D.C.

"The Chemotherapy of Operative and Inoperative Solid Tumors"

JOHN D. HURLEY, M.D., Wauwatosa, Wisconsin

"Problems in the Clinical Evaluation of the Effectiveness of Chemotherapeutic Agents in the Treatment of Malignancies"

JOHN LOUIS, M.D., Chicago

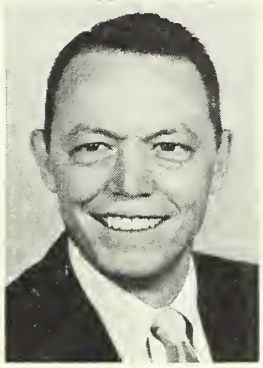
"Treatment of Hematological Disorders with Chemotherapeutic Agents"

ROBERT J. ROHN, M.D., Indianapolis

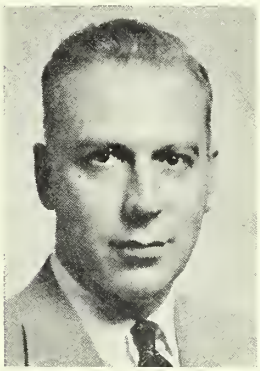
3:00 p.m. Final meeting of House of Delegates, Candidates Room, Murat Temple

Election of officers

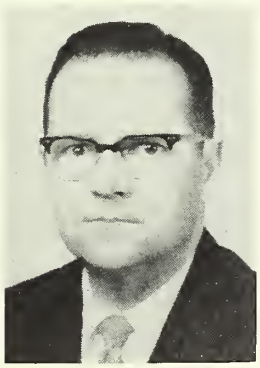
Meetings of Council and Executive Committee immediately following adjournment of House of Delegates



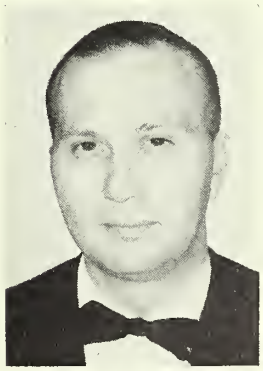
ROBERT J. ROHN, M.D.
Indianapolis
Professor of Medicine, Indiana University Medical Center; Consultant, Hematology, at V.A. Hospital, Ft. Benjamin Harrison Army Hospital and St. Vincent's Hospital; M.D. from Ohio State University, 1943.



T. PHILLIP WAALKES, M.D.
Bethesda, Md.
Associate Director for Collaborative Research, National Cancer Institute; Former chief of clinical branch, Cancer Chemotherapy Service Center; M.D. from George Washington University Medical School, Wash., D. C.



JOHN D. HURLEY, M.D.
Milwaukee, Wisc.
Associate Professor of Surgery and Cancer Coordinator, Marquette University School of Medicine, Consultant in Surgery and Oncology, Great Lakes Naval Hospital; M.D. from University of Wisconsin, 1952.



JOHN LOUIS, M.D.
Chicago, Ill.
Specialist in hematology and clinical pharmacology; Research Associate, University of Illinois; M.D. from University of Illinois, 1950.

Auxiliary Program

Mrs. Glen V. Ryan and Mrs. John M. Nohl,
co-chairmen

Tuesday, October 15, 1963

8:30 a.m. Registration, Murat Temple or Columbia Club

9 to 12 noon Bowling tournament, The Meadows Bowl, 4046 N. Rural Street
* * * Prizes
Women and men—singles and mixed doubles
Dr. and Mrs. Charles Y. Knowles, chairmen

6:00 p.m. Dinner in honor of past presidents of the Woman's Auxiliary to the Indiana State Medical Association, Parlors A, B and C, Columbia Club
All members invited
Mrs. John M. Sullivan, Terre Haute, president, presiding.
Entertainment—"*This I Remember.*"
Cash bar

Wednesday, October 16, 1963

9:00 a.m. Registration continues

9:30 a.m. General Assembly meeting, Parlor A, Columbia Club
All members invited
Informal Coffee Hour during meeting

12 noon to 1:00 p.m. Social Hour

1:00 p.m. Luncheon, Ballroom, Columbia Club
"*Fabulous Fashions*"

6:00 p.m. President's reception, Columbian Room, Columbia Club

7:00 p.m. Annual dinner in conjunction with the Indiana State Medical Association, Ballroom, Columbia Club

Convention Arrangements Committees

GENERAL CONVENTION ARRANGEMENTS: Virgil C. McMahan, Vincennes, chairman; Charles Fisch, Indianapolis, vice-chairman; Ray H. Burnikel, Evansville, secretary; Irvin Sonne, New Albany; Merritt O. Alcorn, Madison; Burton E. Scherb, Terre Haute; John Mader, Richmond; James M. Leffel, Indianapolis; Walter J. Aagesen, Anderson; Boyd Burkhardt, Tipton; M. Shellhouse, Gary; John S. Farquhar, Fort Wayne; Elmer Koehler, Elkhart; Kenneth Kohlstaedt, Indianapolis

GOLF: J. M. McIntyre, Indianapolis, chairman.

TRAP-SKEET SHOOT: Claude M. Donahue, Carmel, chairman.

BOWLING: Charles Y. Knowles, Indianapolis, chairman.

WOMEN PHYSICIANS: Martha C. Souter, Indianapolis, chairman.

WOMEN'S ENTERTAINMENT: Mrs. Glen V. Ryan and Mrs. John M. Nohl, co-chairmen.

FIFTY-YEAR CLUB RECEPTION: Don F. Cameron, Angola, chairman.

ART AND HOBBY SHOW: Philip T. Holland, Bloomington, chairman

Reports of Officers

Executive Secretary

Your Association is approaching another annual session with a record of another successful year. A review of the reports of the various committees, the Executive Committee and the Council activities we believe will bear this out. As far as the Executive Secretary is concerned, one of his greatest responsibilities the last 12 months was, along with the field staff, serving as lobbyist during the 61-day-session of the Indiana General Assembly; also shaking down the new building operation, as well as activity in combatting efforts in the Congress to pass the King-Anderson legislation.

We were fortunate this year in having two physicians, one in the House and one in the Senate, with unusual legislative ability and political acumen. However, it still required a constant vigilance on the part of the staff, and at times going was rough and rugged. If you read the report of the Commission on Legislation, you will note that your Association came through the session with flying colors.

The past year was marked with exceptional activity on the part of our commissions and committees. As you peruse their reports, I am sure you will concur that the members of these commissions and committees have devoted much time and effort on behalf of their fellow practitioners.

About 90% of the secretary's work is detail and routine. His foremost thought is how best to serve the wants of the members and to protect and serve their interests. In this connection, the Executive Secretary is kept busy in a variety of duties, none of which makes glamorous reading.

The Executive Headquarters of the Association is staffed with experienced and efficient personnel and if the Executive Secretary achieves any success in his work, it is largely due to the excellent work of his staff.

JAMES A. WAGGENER, *Executive Secretary*

Treasurer

Following is an itemized statement of the securities in the Building Fund, General Fund and the Medical Defense Fund as of July 31, 1963.

BUILDING FUND	Face Value	Market Value
U. S. Savings Bonds	$ 2,000.00	$ 1,962.00
GENERAL FUND		
U. S. Savings Bonds	8,000.00	7,848.00
U. S. Treasury Bonds	55,000.00	48,921.88
Total Investments—Building and General Funds	$ 65,000.00	$ 58,731.88

MEDICAL DEFENSE FUND	Face Value	Market Value
U. S. Savings Bonds	$ 1,000.00	$ 990.00
U. S. Treasury Bonds	25,000.00	22,328.13
Total Medical Defense Fund	$ 26,000.00	$ 23,318.13

The Executive Committee and Council reviewed our investment portfolio at each meeting and with frequent consultations with the investment department of the bank, did convert $69,000.00 of the Building Fund securities and $13,000.00 of the General Fund securities into cash. Making a total of $82,000.00 securities cashed since July 31, 1962.

Savings & Loan

Savings Account—General Fund (earmarked for AMEF) ... $40,000.00

Cash balances in the respective funds as shown on the books of the Association as of July 31, 1963:

General Fund	$36,843.07
Medical Defense Fund	3,159.94
Journal Fund	4,069.13
Student Loan Fund	414.45
Building Fund	2,359.25
Total cash on hand July 31, 1963	$46,845.84

Following is the audit of Wolf and Company, Indianapolis, for the fiscal year ending Sept. 30, 1962.

I. W. WILKENS, M.D., *Treasurer*

INDIANA STATE MEDICAL ASSOCIATION

BALANCE SHEET

September 30, 1962

Exhibit A

ASSETS

General Fund:		
Cash		7,316.87
Note receivable		550.96
Inventory—tape recorders		269.94
Deposits with postmaster		887.22
Prepaid expenses		518.24
Accrued interest receivable		1,217.88
Receivable from other funds:		
The Journal	7,228.60	
Student loan fund	25,000.00	
Building fund	78,824.93	111,053.53
Reimbursement due for Medicare expenses		6,646.28
Investment in United States obligations at cost, less amortization (Note 1):		
Treasury bonds	67,274.82	

Treasury note	5,000.00		
Savings bonds	66,000.00		
	138,274.82		
Less accumulated amortization	205.15	138,069.67	
Office furniture and equipment:			
General office	21,109.49		
Medicare office	4,437.52		
	25,547.01		
Less accumulated depreciation	11,652.58	13,894.43	280,425.02
Building Fund:			
Cash		2,862.21	
Fixed assets, less accumulated depreciation:			
Building	291,221.11		
Office furniture and equipment	35,303.85		
	326,524.96		
Less accumulated depreciation	5,120.26	321,404.70	
Land		69,187.60	393,454.51
The Journal:			
Cash		319.53	
Accounts receivable:			
Advertising	7,191.79		
Other	123.32	7,315.11	
Postal deposit		203.09	
			7,837.73
(carried forward)			681,717.26
Medical Defense Fund:			
Cash		1,359.04	
Accrued interest receivable		238.91	
Due from general fund		3,000.04	
Investments in United States obligations at cost, less amortization:			
Treasury bonds	19,600.70		
Savings bonds	7,000.00		
	26,600.70		
Less accumulated amortization	433.70	26,167.00	30,764.99
Student Loan Fund:			
Cash		636.69	
Notes receivable		40,263.38	40,900.07
Medicare Fund:			
Cash		12,593.61	
Recoverable payments to doctors		47,406.39	
			60,000.00
			813,382.32

Notes:

1. General fund investments in United States obligations aggregating $62,000.00 have been allocated to the building fund.
2. General fund investments in United States obligations in the principal amount of $20,000.00 are held in escrow by the U. S. Government to secure funds advanced for the Medicare fund.

LIABILITIES AND FUND SURPLUS

General Fund		
Liabilities:		
Notes payable—bank	30,000.00	
Accounts payable	1,706.34	
Accrued expenses:		
Payroll taxes	1,810.03	
Interest on bank loan	176.72	
Payable to other funds:		
Medical defense fund	3,000.04	
American Medical Education Fund	37,120.00	
Deferred income:		
Exhibitors' deposits	10,643.75	
Unearned dues	45,626.20	
Deposits on tape recordings	339.00	
	130,422.08	
Fund surplus (Exhibit B)	150,002.94	
		280,425.02
Building Fund		
Liabilities:		
Accounts payable	26,394.16	
Interest accrued on bank loan	676.02	
Loans from members	24,275.00	
Notes payable—bank	35,000.00	
Payable to general fund	78,824.93	
	165,170.11	
Fund surplus (Exhibit B)	228,284.40	393,454.51
The Journal		
Liabilities:		
Accounts payable:		
Trade	9,835.74	
Employee payroll deductions	32.55	
Payable to general fund	7,228.60	
	17,096.89	
Fund deficit (Exhibit B)	9,259.16	7,837.73
(carried forward)		681,717.26
Medical Defense Fund		
Fund surplus (Exhibit B)	30,764.99	
		30,764.99
Student Loan Fund		
Due to general fund	25,000.00	
Fund surplus (Exhibit B)	15,900.07	40,900.07
Medicare Fund		
Funds advanced by U. S. Government (Note 2)	60,000.00	
		60,000.00
		813,382.32

STATEMENT OF FUND SURPLUS

For the Year Ended September 30, 1962

Exhibit B

General fund:		
Balance, September 30, 1961		227,280.53
Excess of revenues over expenditures (Exhibit C)	3,722.41	
Proceeds of matured bonds transferred to building fund	81,000.00	77,277.59
Balance, September 30, 1962		150,002.94
Building fund:		
Balance, September 30, 1961		114,516.40
Revenue:		
Dues allocated	18,557.50	
Donations from members	6,825.00	
Special donations	8,061.52	

Proceeds from matured bonds transferred from general fund	81,000.00	
	114,444.02	
Less interest accrued on bank loans	676.02	113,768.00
Balance, September 30,1962		228,284.40
The Journal:		
Balance, September 30, 1961		10,151.04
Excess of expenditures over revenues (Exhibit D)		19,410.20
Balance (deficit), September 30, 1962		(9,259.16)
Medical defense fund:		
Balance, September 30, 1961		30,250.06
Excess of revenues over expenditures (Exhibit E)		514.93
Balance, September 30, 1962		30,764.99
Student loan fund:		
Balance, September 30, 1961		15,565.46
Interest earned		271.61
Donations		63.00
Balance, September 30, 1962		15,900.07

STATEMENT OF REVENUES AND EXPENDITURES

Exhibit C

For the Year Ended September 30, 1962

GENERAL FUND

	Actual	Budget	Actual Over (Under) Budget
Revenues:			
Dues	188,300.30	183,200.00	5,100.30
Less dues allocated:			
The Journal	11,322.00	11,472.00	(150.00)
Medical defense fund	4,670.15	4,780.00	(109.85)
American Medical Education Fund	37,120.00	36,240.00	880.00
Building fund	18,557.50	18,120.00	437.50
	71,669.65	70,612.00	1,057.65
Dues available for operations	116,630.65	112,588.00	4,042.65
Interest on investments	5,904.91	3,500.00	2,404.91
Received from A.M.A.	1,248.47	1,000.00	248.47
Net income—annual meeting	4,379.14	5,000.00	(620.86)
Other income	4,336.00		4,336.00
Total revenues	132,499.17	122,088.00	10,411.17
Expenditures:			
Committees and commissions (Schedule C-1)	11,977.28	16,550.00	(4,572.72)
Officers and council (Schedule C-2)	11,789.47	18,400.00	(6,610.53)
Headquarters office (Schedule C-3)	97,156.67	98,500.00	(1,343.33)
Woman's auxiliary	147.50	1,000.00	(852.50)
Donations	270.00	500.00	(230.00)
Employes' retirement fund	7,435.84	7,200.00	235.84
Total expenditures	128,776.76	142,150.00	(13,373.24)
Excess of revenues over expenditures (expenditures over revenues)	3,722.41	(20,062.00)	23,784.41

STATEMENT OF OPERATING EXPENDITURES

Schedule C-1

For the Year Ended September 30, 1962

COMMITTEES AND COMMISSIONS

	Actual	Budget	Actual Over (Under) Budget
Standing committees:			
Grievance	101.78	500.00	(398.22)
Student loan	108.57	100.00	8.57
Medical legal review	26.49	50.00	(23.51)
Commissions:			
Constitution and bylaws	138.05	200.00	(61.95)
Interprofessional relations		200.00	(200.00)
Legislation	3,493.24	6,000.00	(2,506.76)
Public health	535.70	1,000.00	(464.30)
Public information	2,282.92	2,500.00	(217.08)
Special activities	588.48	500.00	88.48
Voluntary health agencies	658.49	900.00	(241.51)
Medical economics and insurance	987.72	1,000.00	(12.28)
Medical education and licensure	686.43	1,000.00	(313.57)
Building	312.02	1,000.00	(687.98)
Government medical services	1,178.30	600.00	578.30
Aging	879.09	1,000.00	(120.91)
Total	11,977.28	16,550.00	(4,572.72)

Schedule C-2

OFFICERS AND COUNCIL

	Actual	Budget	Actual Over (Under) Budget
President	512.70	1,500.00	(987.30)
President elect	10.00	500.00	(490.00)
Council chairman	200.95	300.00	(99.05)
A.M.A. delegates	4,047.18	7,750.00	(3,702.82)
A.M.A. meetings	2,512.92	2,500.00	12.92
Treasurer, auditing and accounting	1,210.00	1,500.00	(290.00)
Council travel	1,292.00	1,000.00	292.00
Council meetings	354.53	1,000.00	(645.47)
Better Business Bureau	150.00	150.00	
Chamber of Commerce	1,000.00	1,000.00	
Executive committee meetings	194.95	600.00	(405.05)
Executive committee travel	304.24	600.00	(295.76)
Total	11,789.47	18,400.00	(6,610.53)

Schedule C-3

HEADQUARTERS OFFICE

	Actual	Budget	Actual Over (Under) Budget
Salaries	55,711.49	61,700.00	(5,988.51)
Supplies	2,993.63	2,200.00	793.63
Telephone and telegraph	4,374.02	5,200.00	(825.98)
Postage	2,340.41	3,000.00	(659.59)
Printing and stationery	1,593.96	2,000.00	(406.04)
Travel	8,244.98	10,000.00	(1,755.02)
Rent and electricity	1,234.77	5,000.00	(3,765.23)
Organization memberships	482.60	400.00	82.60
Interest paid	176.72		176.72
Insurance:			
Hospitalization	1,003.80	900.00	103.80
Other	1,780.77	2,500.00	(719.23)
Extra help	596.15	500.00	96.15

Payroll taxes	1,638.08	1,500.00	138.08
Depreciation	6,595.76	2,200.00	4,395.76
Maintenance—office machines	502.79	400.00	102.79
Moving	1,445.26	500.00	945.26
Building operating expenses	4,312.35		4,312.35
Real estate taxes	329.80		329.80
Unallocated	1,799.33	500.00	1,299.33
Total	97,156.67	98,500.00	(1,343.33)

Exhibit D

STATEMENT OF REVENUES AND EXPENDITURES
For the Year Ended September 30, 1962
THE JOURNAL

	Actual	Budget	Actual Over (Under) Budget
Revenues:			
Subscriptions:			
Members	11,322.00	11,472.00	(150.00)
Nonmembers	610.00	350.00	260.00
Advertising	40,565.54	50,000.00	(9,434.46)
Other	5,645.63	1,500.00	4,145.63
Total revenues	58,143.17	63,322.00	(5,178.83)
Expenditures:			
Salaries (including extra help)	12,823.20	14,625.00	(1,801.80)
Office expense and postage	658.92	500.00	158.92
Printing and reprints	54,473.79	55,000.00	(526.21)
Engravings	3,350.14	5,000.00	(1,649.86)
Travel and meetings	1,500.00	1,800.00	(300.00)
Bulk mailing	1,153.43	1,100.00	53.43
Other publishing expense	537.75	600.00	(62.25)
Payroll taxes	433.45	500.00	(66.55)
Employe group insurance	122.37	140.00	(17.63)
Rent and electricity	2,156.07	2,200.00	(43.93)
Telephone and telegraph	222.82	300.00	(77.18)
Dues and memberships	4.00	50.00	(46.00)
Prizes	100.00	225.00	(125.00)
Unallocated	17.43	150.00	(132.57)
Total expenditures	77,553.37	82,190.00	(4,636.63)
Excess of expenditures over revenues	19,410.20	18,868.00	542.20

STATEMENT OF REVENUES AND EXPENDITURES

Exhibit E

For the Year Ended September 30, 1962

MEDICAL DEFENSE FUND

Revenues:		
Transfer of applicable portion of dues	4,670.15	
Interest earned—U. S. Treasury bonds	662.79	
Amortization of discount—U. S. Treasury bonds	13.25	
Total revenues		5,346.19
Expenditures:		
Legal fees	2,790.00	
Malpractice fees	2,032.15	
Stationery and printing	9.11	
Total expenditures		4,831.26
Excess of revenues over expenditures		514.93

Exhibit F

STUDENT LOAN FUND

Cash balance, September 30,1961		1,539.46
Revenues:		
Collection of student loans	4,752.84	
Interest earned	294.39	5,047.23
		6,586.69
Expenditures—loans to students		5,950.00
Cash balance, September 30, 1962		636.69

Chairman of the Council

The Council met immediately following adjournment of the final session of the House of Delegates in 1962 for the purpose of organizing itself. Dr. K. O. Neumann, Lafayette, was elected chairman, and Dr. Wendell E. Covalt, Muncie, and Dr. Ralph V. Everly, Indianapolis, were elected members of the Executive Committee. The new councilors introduced were Dr. P. J. V. Corcoran, Evansville; Dr. Lowell Steen, Gary; Dr. Albert Donato, Indianapolis, and Dr. Jene Bennett, South Bend.

Midwinter Meeting, January, 1963

The Council met for its regular midwinter meeting January 20, 1963, in the offices of the Association in Indianapolis.

The financial report of the treasurer and the annual audit of the CPA were reviewed and approved.

The Council received reports from the delegates to the American Medical Association.

Representatives of Blue Shield-Blue Cross appeared before the Council to discuss the physician group program as authorized by the Council a year ago. The report indicated that about half of the physicians were members of Blue Cross-Blue Shield and that only a small percentage had availed themselves of the opportunity of the deductible program; therefore the Blue Cross-Blue Shield organization requested approval from the Council to eliminate the $750 to $1,000 deductible policies. This request was approved, and the Council also approved a re-opening of enrollment for all members of the Association.

Dr. A. C. Offutt, State Health Commissioner, appeared before the Council to discuss the unified licensure bill for nursing homes and two bills on tuberculosis.

Dr. Elvis J. Stahr, jr., the new president of Indiana University, was a special guest at this meeting. He brought greetings to the Association and offered the cooperation of the university with the Association.

The Council also heard from Dean Van Nuys concerning the possible need for another medical school in Indiana. He stated it might be possible for Indiana University to start a second medical school as has been done in some other areas in the country. He also discussed the internship program at the university.

The Council received reports from the Building Committee and the Student Loan Committee and authorized renewal of the Medicare contract for another year.

The Council nominated Drs. W. L. Portteus,

Franklin; Bernard D. Rosenak, Indianapolis, and E. T. Edwards, Vincennes, for election to the Blue Shield Board for another three-year term.

Blue Cross liaison representatives appeared before the Council for a discussion on Resolution 12, stating that the medical members of the Blue Cross Board had presented this resolution as instructed by the House of Delegates, but that labor and hospital people did not approve the resolution and they got nowhere in the Blue Cross Board meeting.

The chairman of the Commission on Convention Arrangements presented an outline of the program for the 1963 annual convention which was approved.

The chairman of the Commission on Legislation reported on the legislative plans for the Association in the current General Assembly.

The Council reviewed the annual membership report noting that there was an increase in membership.

The Council appropriated $500 for the purpose of beginning operation of a Mental Health Steering Committee.

A report was received from the AMA Council on Occupational Health stating that this group wants to meet with the Indiana State Medical Association in 1965 and that it was necessary to select a site for this meeting. By consent it was decided that the 1965 annual convention would be held in Indianapolis and that the AMA Occupational Health Council would be invited to attend.

The Council was informed of a request for the use of the Association building by outside groups. A survey was presented which had been made of other state associations concerning the use of their building by outside organizations. No action was taken on this matter at this time.

Payment of the treasurer's expenses in attending AMA meetings was approved.

The Council established a liaison committee with Indiana University to consist of the president, president-elect, the chairman of the Executive Committee, the chairman of the Council and one other councilor.

A proposal was received from the Indiana National Bank concerning the operation of the Student Loan program.

Copies of the Articles of Agreement of the Indiana Joint Council to Improve the Health Care of the Aged were approved.

The Council instructed representatives of the Association to oppose a sales tax on prescription items.

Spring Meeting, April, 1963

The Council convened for its annual spring meeting April 28, 1963, in the headquarters office of the Association and heard the routine reports of the officers, treasurer, and others.

The Council discussed participation in the Science Fair and decided not to contribute financially to the support of the National Science Fair program.

A revision in the Student Loan interest rate was discussed. A resolution was adopted and referred to the House of Delegates.

The dean of the I. U. School of Medicine, Dr. John Van Nuys, discussed budgetary matters in keeping with the action of the Legislature on the medical school's budget.

The members of the medical board, with their secretary Dr. Paul T. Lamey acting as spokesman, appeared at the meeting to explain why the medical board discontinued reciprocity and endorsement with 14 states. Dr. Lamey also explained the legislation adopted by the current session of the General Assembly which would authorize the board to again issue temporary training permits to interns and residents desiring to come to Indiana for continuation of their schooling.

The State Board of Health presented a request to the Council from the Federal Government which asked that records be made available for a study or investigation of deaths caused by pesticides and of deaths possibly caused by Enovid. An investigation also will be made into the reliability of diagnoses of chronic reportable diseases. The request for use of the State Board of Health records for this purpose was approved.

The Council took note of the legislative program and expressed its appreciation to Senator Kirtley and Representative Bowen for their outstanding work.

The Reverend Dr. Paul McCleave, director of the new Department on Medicine and Religion which has been established by the American Medical Association, appeared at the meeting to give an outline of the goals of this new department. Following his presentation, the Council requested the Executive Committee to assign the responsibility for cooperating with this department to either the Commission on Inter-Professional Relations or the Commission on Special Activities.

The Building Committee presented a report on the operating expenses of the building for the first 11 months of the year. The Council felt that this report should be read by every member of the Association and subsequently ordered its publication in *The Journal*.

The Council acknowledged receipt of a gift of $1,250 from the auxiliary for the purchase of tables and chairs for the basement.

The Council also took action to recommend to the various district officers that the district societies make nominations for new members on the Blue Shield Board from previous members of this board or nominate physicians who have been members of the Commission on Medical Economics and Insurance.

The Council also discussed various actions of the Blue Shield Board and the attitude of the physicians comprising this particular board.

Dr. E. T. Edwards, chairman of the Ad Hoc Committee on the transfer of professional services from Blue Cross to Blue Shield, reported on the activities of this committee.

The Council further discussed the internship program currently being offered at the I. U. School of Medicine, received a report from the Student Loan Committee, and a report on legislative activity.

Also received during this meeting was a study made by the Commission on Special Activities concerning the attendance at county medical society meetings. A copy of this survey is to be distributed to each component society for its information.

A request from the Jasper-Newton County Medical Society to dissolve as a joint society and authorization to establish two separate county societies was approved.

Summer Meeting, July, 1963

The Council met July 14, 1963, in the headquarters office of the Indiana State Medical Association to conduct its regular summer meeting.

Tribute was paid to Dr. Harry R. Stimson, Gary, immediate past president of the Association, whose untimely death occurred June 30.

Reports were received from the councilors concerning conditions in their respective districts and from the officers of the Association.

The Council further discussed requests which had been made previously for the use of the building by other groups. Upon motion duly made and seconded, the Building Committee was requested to devise a set of rules governing use of the building by para-medical groups and to return their recommendations to the Council for approval.

At the request of the Executive Committee and the officers, the Council rearranged the program of the annual convention in order to duplicate a program which was given before the Conference of Presidents and Officers at its annual meeting in Atlantic City. This meeting is to be held Wednesday afternoon, October 16, at 3:30 and is highly recommended to every member of the Association.

A resolution, to be submitted to the House of Delegates from Delaware-Blackford Medical Society, was called to the attention of the Council. No action was taken on this resolution.

The Council took recognition of the report of the election of Dr. Lester D. Bibler, Indianapolis, to a two-year-term on the AMA Board of Trustees and the election of Dr. Francis Land, Fort Wayne, as a member of the AMA Council on Medical Education and Hospitals. The elections took place during the annual meeting of the AMA in Atlantic City in June. The president also reported on many other matters that happened during the Atlantic City meeting for the information of the Council.

The treasurer's report and audit were accepted as presented.

The Blue Cross liaison representative appeared before the Council, gave a report on happenings before the Blue Cross Board and called attention to a proposed change in the articles of incorporation which would say in effect that the Blue Cross plan would pay for "any and all other health care expenses."

Dr. Van Nuys, dean of the I. U. School of Medicine, informed the Council that there would be a slowdown on some of the plans at the university due to the current controversy over taxation in the state of Indiana. It would appear at this time, the dean said, "that the university would not receive the money which it had anticipated receiving at the close of the General Assembly." He also pointed out that the state budget committee had ordered an increase of $200 on in-state student fees. The Riley Hospital addition will be ready for occupancy in less than a year, he said, and plans for the new university hospital had been completed but construction will depend upon adequate financing.

The dean also commented on the fact that the 1963 class would be composed of 210 students—the largest class in the history of the school—and perhaps the largest class of any medical school in the country. He also reported that the executive committee of the university had adopted a plan for freshman counseling.

Dr. J. B. Hickam, chairman of the Department of Medicine, reported that the university would now conduct a preceptor program as a part of the medical education program. Also discussed was the matter of internship. This was also discussed by Dr. Harry Klepinger, chairman of the Association Commission on Medical Education. He pointed out the shortage of general practitioners, what the commission is doing on postgraduate and continuing educational programs and increased contact being made with medical students to become more aware of their problems. Dr. Klepinger also complimented the Rural Health Committee of the Commission on Public Health for the outstanding program it had conducted for the junior and senior medical students earlier in the year.

Dr. George T. Lukemeyer, chairman of the house staff committee department at the school of medicine, discussed the admission policy and the work of the admission committee in the postgraduate program at the university.

The Council was also made aware of the need for closer liaison between the Association and the Indiana chapter of the Student American Medical Association.

The chairman of the Grievance Committee referred several matters to the Council for its information and action.

Reports were received from the Student Loan Committee and the Ad Hoc Committee with the Indiana Hospital Association. Also received were reports from the Commission on Legislation, the Commission on Public Information, and the chairman of the sub-committee on Mental Health of the Commission on Governmental Medical Services.

The Council elected Drs. Don Wood and Roy Geider members of the Trust Committee of the Indiana Medical Education Foundation for three-year-terms ending in October, 1966.

The Council again discussed the recent ruling concerning the discontinuance of endorsement by

the Board of Medical Registration and Examination with some 14 other states, pointing out that the situation was creating several problems in southern Indiana with the graduates from the Kentucky medical schools. The Council took action then that the Commission on Medical Education and Licensure should arrange a meeting immediately with the members of the medical board for further discussion of this problem. However in the meantime, the Executive Committee together with members of the medical board, the chairman of the State Department of Corrections, the secretary of the State Board of Health and the Commissioner of Mental Health were all requested to meet with the Governor to discuss these and other matters.

The Council heard a presentation by Dr. Albert Donato of an insurance plan, proposed by an Indiana company for the benefit of physicians in the state.

The Council instructed the Commission on Convention Arrangements that the 1965 convention would be held in conjunction with a meeting of the AMA Council on Occupational Health and that the Occupational Health Council should be invited to work with the scientific work committee in arranging the program.

This completes the report from the chairman of the Council, scanning the various actions of the Council during the past year. Copies of the minutes of each of the meetings have been given to the Reference Committee for their perusal. The Council has had an exceedingly busy year with many varied matters coming before it.

I desire at this time to express my appreciation to the members of the Council for their faithful and prompt attendance at Council meetings; this has allowed us to expedite our business.

K. O. NEUMANN, M.D., *Chairman*

First Councilor District

The First District annual meeting was held Thursday, May 9, 1963, at the Evansville Country Club, jointly with the First District auxiliary.

The dinner was preceded by a social hour.

Following the dinner, an illustrated talk was delivered by Colonel William Bowden, of Bunker Hill Air Force Base, who spoke on "Function of the Air Command." The movie, "Operation Hometown," was shown by Mr. Robert J. Amick, Field Secretary.

After this, separate meetings were held by the Auxiliary and the District Society. Brief talks were given by E. T. Edwards, M.D., Councilor from the Second District, and Milton F. Popp, M.D., Councilor from the Twelfth District.

The following were elected as officers for the present year: Guy Hoover, M.D., President; Frank W. Oliphant, M.D., Vice-President; Eugene Austin, M.D., Secretary-Treasurer; and Dr. Gilbert M. Wilhelmus, alternate councilor.

PATRICK J. V. CORCORAN, M.D., *Councilor*

Second Councilor District

The annual meeting of the Second Councilor District, Indiana State Medical Association was held June 6, 1963 at the Bloomington Country Club. During the business meeting a discussion of the transfer of professional services from Blue Cross to Blue Shield was presented by the Councilor. The 1964 meeting will be held at Vincennes. Dr. Paul Arbogast of Vincennes was elected President and Dr. J. S. Brown of Carlisle was re-elected Secretary. The present Councilor was re-elected.

The program consisted of a film, "Operation Hometown" prepared by Dr. Annis, President of AMA and a talk by Wardell Pomeroy, Ph.D. of the I.U. Institute for Sex Research, "Studies in Human Sexual Behavior." The latter talk was supported by a grant from the Merck Sharp and Dohme Postgraduate Program. Mr. Converse discussed progress of Blue Shield during the past year.

E. T. EDWARDS, M.D., *Councilor*

Third Councilor District

The Third District Meeting was held at Spring Mill State Park in May, 1963 and was attended by the usual group of very loyal members.

The program included Dr. Richard D. Hawkins, Bedford, who spoke on "Practical Pediatrics," and Dr. Thomas Marshall, Louisville, Kentucky, who spoke on "Radiological Diagnosis of Breast Tumors." Dr. Hawkins has become a regular speaker at our Lawrence county-sponsored meetings, and he is the most concise and lucid teacher that I have ever listened to. He is a credit to the private practice of medicine. Dr. Marshall's paper was interesting and showed us a new diagnostic tool.

The question of poor attendance is still unsolved. May I advise you, now, that next year at the Jeffersonville meeting, you will be electing a Councilor to replace me. I have served my two terms and cannot be re-elected. The position of Councilor is the most important office that the district has to fill, and I urge you to turn out in ample numbers so that you may express your wishes for the next Councilor of the Third District.

The membership continues to grow, hospitals are expanding and this is good.

My thanks to you for another year free of problems.

JOHN M. PARIS, M.D., *Councilor.*

Fourth Councilor District

The Fourth District Medical Society held its annual meeting Wednesday, May 8, 1963 at the Dearborn Country Club, Aurora, Indiana. The men participated in a golf tournament at the Country Club and the annual tournament award was won by Dr. Richard O'Bryan of Columbus, Indiana. There were many prizes awarded to the other participants. The ladies visited and played cards during the golf tournament.

Dr. Leslie Baker presided at the business meeting of the delegates held in the Country Club prior to our joint luncheon. A discussion of future meeting dates was held and it was decided to change the annual meeting date to the third Wednesday in May each year to avoid conflict with the I. U. Medical School Alumni day. The delegates were instructed in the importance of activity in the legislature and political field and the availability of service from the AMA and ISMA. The councilor reported to the delegates and Mr. Converse reported on the progress of Blue Shield.

The annual election of officers was held with the following officers elected:

President—W. R. Shaffer, M.D., Greensburg

Vice President—S. D. Ellis, M.D., North Vernon

Secretary-Treasurer—J. C. Miller, M.D., Greensburg

Blue Shield Director—J. M. Black, M.D., Seymour

The next meeting will be held in Greensburg the third Wednesday in May 1964.

An excellent luncheon was served at the Country Club which was presided over by Dr. Baker. Many guests were introduced and golf and door prizes were awarded. Following lunch, Mr. Waggener and Mr. Amick of the ISMA, showed the Dr. Annis film entitled "Operation Hometown."

Following lunch the ladies were taken on a tour of a restoration project in Aurora. Dr. Baker presided at a very stimulating scientific meeting. Dr. John Cranley of Cincinnati, Ohio finished his presentation of "Diagnosis and Treatment of Vascular Disease" started at a previous district society meeting. Dr. Don Fisher of Cincinnati presented an informative lecture on "Interesting Problems in Ballesto-Cardiography."

Later in the afternoon, the physicians and wives were guests of the Dearborn-Ohio Medical Society and members of that local pharmaceutical group on an Ohio River party boat. Dinner was served, refreshments and dancing were enjoyed by the party.

Attendance at the district meeting was 60, about half the normal attendance for the Fourth District Society. With the usual fine program and attendance, it is felt that not competing with the I. U. Medical School Alumni Association will again stimulate the activities.

The councilor wants to thank the many members of the district for their cooperation and activity in their local medical society and in participating in the functions of the ISMA. The district appreciates the efforts of Mr. Robert Amick for his counsel and informative appearance at the local society and staff meeting.

The councilor is grateful for the cooperation and the opportunity to serve his constituents in the 4th district.

JOSEPH M. BLACK, M.D., *Councilor*

Fifth Councilor District

The affairs of the fifth District of the Indiana State Medical Association have gone on quite uneventfully for the past year. No complaints of note have come to the attention of the Councilor.

The Fifth District will have its annual meeting at Cataract Lake Yacht Club, September 25. The Putnam County Medical Society will be host. An interesting program is promised.

V. EARLE WISEMAN, M.D., *Councilor*

Sixth Councilor District

The annual meeting of the Sixth District Medical Society was held Thursday, May 16, at the Forrest Hills Country Club at Richmond.

Golf (for men only) was enjoyed during the morning with Dr. Tom Shields and Dr. James Daggy serving on the Golf Committee.

Luncheon was available at the country club to those who wished.

The Scientific Program began at 1:30 and the program was as follows:

Recent Trends in Cancer Chemotherapy—
Robert J. Rohn, M.D.,
Professor of Medicine and Cancer Coordinator, Indiana University

The Role of Child Guidance Clinics—
Robert W. Schmitt, M.D.,
Medical Director, Child Guidance Clinic, Wayne County, Inc.

New Responsibilities and Problems of the Medical Profession for the Aging—
Andrew C. Offutt, M.D.,
State Health Commissioner,
Indiana State Board of Health

Current Status of Vaccines—
Albert L. Marshall, Jr., M.D.,
Director of Division of Communicable Disease Control, Indiana State Board of Health

Operation Hometown (Film)—
Edward R. Annis, M.D., President,
American Medical Association
(This film described the new round of attack against HR 3920, the current version of the revised socialistic King-Anderson Bill)

The Annual Business Meeting was conducted by President Dave Ellis, Rushville. Mr. James Waggener, Indiana State Medical Association secretary, and Mr. Joe Palmer, Indiana State Medical Association office personnel, were present. New officers elected were: Dr. Perry Seal, Brookville, President; Dr. Charles Loomis, Richmond, Vice-President; Dr. William E. Murray, New Castle, Secretary-Treasurer; and Dr. Frank Green, Rushville, Alternate Councilor.

A social hour was enjoyed after the business meeting in the Club Lounge, and after dinner, a talk by Mr. Landrum R. Bolling, President of Earlham College, was presented. Mr. Bolling, an analyst on international affairs, a teacher of political science and World War II correspondent, gave a most interesting program.

Auxiliary members had the opportunity to play golf, bridge or visit the McGuire Art Museum during the afternoon. Several joined their husbands to see the film, "Operation Hometown". They were also guests for the social hour and the dinner.

The 1964 Meeting of the Sixth District will be held in New Castle.

WILLIAM R. TINDALL, M.D., *Councilor*

Seventh Councilor District

Dr. Albert M. Donato, of Indianapolis, was elected President-Elect of the Seventh District Medical Society at the organization's annual meeting held May 15, 1963, at the Marlgate Restaurant, in Martinsville.

Dr. Donato will serve in 1964-65 and will succeed Dr. Joseph A. Ferrara, of Franklin.

Dr. James H. Gosman, of Indianapolis, was elected Secretary-Treasurer and Dr. Charles A. Jones, of Franklin, was reelected alternate councilor.

Dr. Glen V. Ryan, of Indianapolis, was reelected to represent the district on the Board of Directors of Blue Shield.

Dr. Ray D. Miller, of Martinsville, retiring President of the Society, presided at the dinner meeting which followed an afternoon of golf at the Martinsville Country Club.

Following the election, Mr. Robert J. Amick, field secretary for the Indiana State Medical Association, showed a motion picture film on "Operation Hometown," a national legislative program for county medical societies, and presented taped excerpts from an address by Dr. Edward R. Annis, President of the American Medical Association, given at the national legislative conference sponsored by the AMA, in Chicago.

ALBERT M. DONATO, M.D., *Councilor*

Eighth Councilor District

The Eighth District Medical Society Meeting was held at the Portland Country Club, Portland, on June 5, 1963.

The Meeting for doctors and their wives of the District was arranged by Drs. Eugene M. Gillum, President, Ralph M. Steffy, Secretary, and Joseph Vormohr, Program Chairman.

A business meeting, at 5:30 P.M., was in charge of the President, Dr. Gillum. At this meeting, Dr. Donald R. Taylor, of Muncie, a radiologist, was elected Councilor for the District. Dr. William L. Baughn, Anderson, was elected President, and Dr. Robert D. Williams, of Markleville, was elected Secretary.

The 1964 District Meeting will be held in Anderson, Indiana, at a date to be announced later.

A social hour at 6:00 o'clock was followed at 6:30 with dinner for the doctors and their wives.

The speaker of the evening was Mr. K. L. Peck, Vice-President of Indiana National Bank, who spoke on the "Keogh Bill" and how it affects doctors.

Following the speaker, a film, "Operation Hometown" was shown to the group. This film featured Dr. Edward R. Annis, President of the American Medical Association.

Among the guests attending the meeting were Dr. Maurice E. Glock, President of Indiana State Medical Association; Mr. James A. Waggener, Executive Secretary of Indiana State Medical Association, and Mr. Howard Grindstaff, Field Secretary.

GORDON B. WILDER, M.D., *Councilor*

Ninth Councilor District

The annual meeting of the Ninth Councilor District Medical Society was held May 15, 1963 at the Ulen Country Club in Lebanon, Indiana. The Boone County Medical Society served as hosts. Dr. Clarence G. Kern, President, presided and Dr. Donald W. Boyer served as Secretary-Treasurer. Many duffers and a few golfers enjoyed the facilities of the Ulen Country Club during the day. The noon luncheon was attended by 50 members and wives who watched "Operation Hometown." Mr. Joe Palmer of the ISMA office discussed current medical and political problems.

Dr. Robert Scott of Indianapolis presented a program on "Pediatric Emergencies" including poisonings, jaundice in the newborn and convulsions in children. A question and answer period followed.

A business meeting for delegates and members included the Councilor's report, a summary of legislative action relating to medicine by Dr. James Kirtley (a member and State Senator), and a discussion of Blue Shield and Blue Cross problems. A discussion of problems relating to the Coroner's Office was followed by a discussion of socio-economic, political, and medical activities.

Following a social hour and dinner, approximately 80 members and wives heard Dr. Donald E. Wood, President-Elect of the ISMA discuss AMPAC, its effectiveness and its relation to organized medicine. The evening's entertainment was provided by the Wabash College Glee Club.

The 1964 meeting will be held in Attica, Indiana with Fountain-Warren County Medical Society as host on Thursday, May 21st, 1964.

There has been only a minimal amount of controversy during the past year in the Ninth District. Several societies have done outstanding public-relation jobs in their counties in their opposition to King-Anderson type legislation and their support of the principle of freedom in the practice of medicine.

It is to be hoped that more members and more societies will become more active in medical, economic and political arenas. We might all well remember the words of Pericles, who about 450 B.C. said, "We do not say that a man who takes no interest in politics minds his own business. Rather, we say he has no business here at all."

K. O. NEUMANN, M.D., *Councilor*

Tenth Councilor District

The 10th District held two meetings in the past year. The first was on October 3rd, 1962, at Phil Smidt's Restaurant, Whiting. This was a dinner meeting attended by 146 members and their wives.

During dinner, Dr. Leonard Neal, 10th District President, opened the meeting by introducing Dr. Harry R. Stimson, ISMA President; Dr. Ralph Eades, 10th District Councilor; Dr. Thos. C. Tyrrell, President LCMS and Mr. Larry Converse, Director of Physician Relations, Indiana Blue Shield.

Minutes of the May District meeting were read and approved.

An election of District officers was held with the following results: 10th District Councilor for three years to December 1965, Dr. L. H. Steen; President, Dr. Forrest R. LaFollette; Secretary, Dr. E. J. Dierolf.

Program Chairman, Dr. Arthur Kuhn, introduced Dr. Kenneth Stegman of Homewood, Ill., who spoke and showed slides on "Adventures With The Medico Orthopedic Program in Saigon, Viet Nam." The program proved to be unusual both as entertainment and information, and was loudly applauded.

The second meeting was held on May 15, 1963 at the Sheraton Inn, Gary: Dr. F. R. LaFollette of Whiting, as President of the 10th District Society, presided at the meeting.

At 4:30 p.m. a movie entitled "Handling of Disturbed Patients by Police and Others" was shown. Following the film, Superior Court Judge Fred Egan discussed "The Legal Rights of Disturbed Patients," and made a plea for additional hospital facilities, so that violent patients could be kept in a hospital, rather than in a jail.

Dr. David C. English of Jackson, Mich., discussed "Modern Drugs Available in Nervous Disorders." He included a discussion of the millions of Americans now using various tranquilizers and related drugs.

During dinner, Mr. Howard Grindstaff, Field Representative of the Indiana State Medical Association, showed the film "Operation Hometown," in which American Medical Association President Dr. Edward Annis, appealed for active vigilance by doctors during the current session of Congress, with regard to King-Anderson type legislation.

Dr. LaFollette expressed the Society's appreciation to Dr. Harry Brandman, who arranged the program, and to the Smith, Kline & French Laboratories for its sponsorship.

Following dinner, Attorney Robert Lucas of Gary discussed "What the New Indiana Law Offers Doctors—as Groups and as Individuals," permitting doctors to form groups as corporations for the practice of medicine. He discussed the various tax and liability advantages of this type of organization.

Dr. Brandman then introduced Dr. Robt. S. Daniels, Chief, Psychiatric Consultation Department, University of Chicago, who discussed "The Family Doctor and the Disturbed Patient." He appealed for more counseling by family physicians in the area of emotional difficulties in addition to physical difficulties.

Dr. Brandman led the discussions following each of the presentations.

L. H. STEEN, M.D., *Councilor*

Eleventh Councilor District

It has now been some eight months since we gathered together. In this interim really little has happened to the medical profession as a whole. When we last met, we had just seen the King-Anderson Bill defeated and were elated. This was followed by the House of Delegates meeting in French Lick, Indiana. At which time a resolution from this district concerning the Corporate Practice Act was passed and another from this district concerning the vote of the House of Delegates was acted upon with some slight changes.

In the past year the State Medical Building has been put to extensive use. Those who have seen it and have used it are very much in favor and look upon it with pride of accomplishment.

Our legislative record in the last legislature, long as it may have been, as fruitless as it may have seemed, was excellent and most of the bills backed by your state society were passed.

Little else of importance has occurred. I would remind the membership that those who would divide us and those who would change our way of free enterprise for that of a socialistic form of medical care constantly eat away at our rights and privileges much as termites might destroy a house. So that all appears well; only the very beams of support have been eaten away. We must constantly be on the watch for these small ants. They have the same caliber as that proverbial ant and might be called the insects of micturition. We must be on a constant vigil. I would urge the members of this society to look to I-HOPE and to AMPAC and to study the effectiveness of such organizations and to contribute to their effectiveness both monetarily and with considerable time and effort.

Those of you who have not made a contribution to the building which was erected in your honor and for your particular best interests, I would urge you see this building. And find for yourself if it is not also one of your obligations.

We are now gathered for a third or a fourth time to consider the resolution of the Carroll County Medical Society of April 19, 1961. We are here to decide whether or not this district needs one or two meetings per year. This we have weighed heavily in the past and should weigh heavily again, but certainly should act upon in this meeting. I think it amounts to whether or not the increased availability of communications has actually brought us closer together. We must be sure as we enter into this controversy that we are not a house divided against itself. Lincoln would say the same of our profession today—"A house divided against itself can not stand." We must unite, we

must work hard or we shall not stand. I would have you know that the Wheat Referendum is of great importance to you and me and as this report is written the vote is actually in progress. Whether the farmer chooses socialism in the form of these severe controls will certainly guide the Congress as to whether or not they should control the medical profession also. We must look at this with great interest, with great understanding. These people have been far more socialized than you and I.

I would like to relate that our alternate Councilor, Dr. Hillis, was present for most of the French Lick annual meeting and was present at the last Council meeting in Indianapolis. I have sought his counsel and appreciate his words of wisdom, kindness, understanding and also his opinions.

I have but one more time to report to you as Councilor from this district in this particular term of office. I was told by a former Councilor that I would learn much at the Council table, that it was indeed an education which he would not care to miss. This is a true statement. I have also learned other things. I have learned that your state organization works hard and spends many hours in order that you and I may have the fruits of its labors. I have learned that your organization, and mine, is not run by a clique of old individuals and old gentlemen, but is operated by young men, by vigorous men and by men of understanding and by men of true worth and devotion. I find that each district has chosen its Councilor and its alternate Councilor very well. I feel that the House of Delegates chooses its Presidents wisely. I have learned that all of the dickering, and the haggling and the political "stew" that occurs is full worth the time. These are only avenues that lead to a super highway of better medical care and a better organization to represent both you and me.

I should like at this time to take the opportunity to thank you for the privilege of having served as your Councilor these past three years. It is my sincere hope that I have been worthy of your trust.

I would have you know that while I have not missed a Council meeting since the adversity of the shadow of death has raised its ugly hand against my household, I have not been quite as faithful in some of my duties in the past four months as I might have been. I can only ask in this respect your forgiveness, your forbearance.

EUGENE S. RIFNER, M.D., *Councilor*

Twelfth Councilor District

The Twelfth District Medical Association held its Annual Meeting on May 22, 1963, in Fort Wayne, with the Allen County Medical Society serving as host. Dr. Donald G. Mason, Angola, presided. The minutes of the meeting held May 16, 1962, and the Treasurer's report were accepted as read. Dr. Maurice E. Glock gave a very fine report on the recent activities of the ISMA. I made a report relative to the activities of the Council during the past year. Dr. Truman E. Caylor reported on the activities of I-HOPE. Dr. Francis L. Land and Dr. Mahlon F. Miller reported on recent AMA activities and Blue Cross-Blue Shield affairs respectively. The election of officers followed and Donald G. Mason, M.D., Angola, was reelected president for a second term. Charles A. Novy, M.D., Garrett, was elected vice-president. Marvin E. Priddy, M.D., Fort Wayne, was reelected secretary-treasurer. A resolution from the Whitley County Medical Society was presented and was fully discussed. The resolution was put to a vote and lost. The misinformation which led to this resolution is being corrected. Forty-seven members were in attendance at the business meeting.

The date for the annual Twelfth District Medical Association meeting for 1964 was voted upon and will be held on May 20, 1964 in Fort Wayne, unless any other County Medical Society in the district prefers to host the meeting.

After the business meeting, a social hour and dinner followed. The speaker of the evening was Dr. Richard D. Burg, assistant Professor of Medicine, Ohio State University Medical School, who spoke on various aspects of rehabilitation. The attendance at dinner and Dr. Burg's address was 192.

The Twelfth District Medical Association has enjoyed a good year, the district has been represented at all Council meetings usually by both the Councilor and alternate Councilor, Dr. William R. Clark. We have attempted to disseminate information gained at these meetings to members throughout the district and frequently have asked Twelfth District members for their opinions, problems and suggestions. The outlook for 1963-64 year is excellent.

MILTON F. POPP, M.D., *Councilor*

Thirteenth Councilor District

The annual meeting of the 13th District of the Indiana Medical Society was held September 19, 1962, in South Bend, Indiana. The afternoon scientific program consisted of papers by Wilfred Dorfman, M.D., of State University of New York, and H. Angus Bowes, M.D., of the University of North Dakota, on the "Recognition and Treatment of Depressed Patients."

The business meeting following the scientific program was conducted by the President, D. Logan Dunlap, M.D., and included approval of the financial statement and the election of officers. The officers elected were as follows:

President—Robert L. Rouen, M.D., Elkhart
Vice-President—John T. Kemp, M.D., Michigan City
Secretary-Treasurer—Cecil R. Burket, M.D., Bremen
Councilor—Jene R. Bennett, M.D., South Bend
Alternate Councilor—Raymond E. Nelson, M.D., South Bend

The meeting was addressed by Burton E. Kintner, M.D., retiring Councilor, by Maurice Glock,

M.D., the ISMA President-Elect and by Mr. Joseph Palmer, I-HOPE, Executive Secretary. The dinner meeting was addressed by Mr. Charles W. Ainley of Goshen, the candidate for U. S. Representative, 3rd District of Indiana. Approximately 200 doctors and their wives attended the evening meeting.

The 13th District meeting for 1963 is to be held September 18, 1963, at the Hotel Elkhart, Elkhart, Indiana, beginning at 3:00 P.M.

JENE R. BENNETT, M.D., *Councilor*

The Journal

The 1962-63 budget was set by the Budget Committee with an expected deficit of $2,272.00. Since the fiscal year for dues and the fiscal year for *The Journal* start on January 1 and October 1 respectively, *The Journal* has benefited from the new subscription price during the last nine months of the present fiscal year only. This will explain why the budget was set with a slight deficit.

At the time this report is being written (August) we are about even with the budget. The Convention Issue in which this report is printed is usually more expensive than an average issue. Depending on the cost of the Convention Issue, the prediction at this time is that the fiscal affairs of *The Journal* will be within the budget or close to it.

Advertising revenue has not increased this year as expected by advertising authorities. Indeed it has been a little lower than the previous year. However the Budget Committee members were realistic in their appraisal of the advertising market and our receipts from that source, while being less than previously, have been almost exactly as anticipated in the budget.

All other aspects of our operation during the year have been healthy and vigorous. We continue to receive an adequate number of well-written scientific articles. The overly large backlog of accepted papers, which resulted from the decrease in advertising pages and the consequent smaller size of each issue, has been decreased by the judicious rejection of some papers which, but for subject matter which was not thought to be apropos in a crowded market, would have been otherwise acceptable.

Our regular special features have continued with the exception of Laboratory Medicine. Although Dr. Musser extended this feature after he left Indiana and while he was serving with the Army, he found that its long term continuance was not practicable.

X-Ray Conference, which is contributed to by roentgenologists over the state and is edited by Dr. Erich Lang, originated this year and each month presents an interesting and instructive lesson in roentgenography.

Dr. Arnold Lieberman's stories, which have appeared at intervals over the past three years, are being collected and published in book form by Charles C Thomas, and will appear soon.

FRANK B. RAMSEY, M.D., *Editor*

Delegates to AMA

Two Indiana physicians were elected to high posts in the American Medical Association at the national organization's annual meeting June 16 to 20 in Atlantic City.

Dr. Lester D. Bibler, Indianapolis, was elected to a two-year term on the AMA's Board of Trustees and Dr. Francis L. Land, Fort Wayne, was named a member of the Council on Medical Education and Hospitals.

James A. Waggener, executive secretary of ISMA, was re-elected secretary-treasurer of the Conference of Presidents and Officers of State Medical Associations.

ISMA delegates, alternate delegates and officers attended the annual meeting. Dr. Jack Shields, Brownstown, served as a member of the reference committee on Legislation and Public Relations.

Enlargement of the board of trustees, the sections and scientific program of the AMA, interns and residents, a new Institute for Biomedical Research, a physician's pension plan and the relation between tobacco and disease were among the major subjects acted upon by the House of Delegates.

Dr. Norman A. Welch, Boston, member of the House of Delegates since 1951 and speaker of the house since 1959, was named president-elect of the Association by acclamation. Dr. Welch will become president at the June, 1964, annual meeting in San Francisco, succeeding Dr. Edward R. Annis, Miami, Florida, who assumed office at the Tuesday night inaugural ceremony in Atlantic City.

The AMA 1963 distinguished service award was voted to Dr. Lester R. Dragstedt, Gainesville, Florida, research professor of surgery at the University of Florida School of Medicine, for his achievements in the fields of education, research and practicing surgery.

Final registration figures at the meeting reached a grand total of 36,811, including 12,924 physicians.

Board of Trustees

The house adopted amendments to the Constitution and Bylaws designed to implement the recommendations presented in June, 1962, by the Ad Hoc Committee on the Board of Trustees. The changes will increase the size of the board from 11 to 15 members, by adding three elected trustees and including the immediate past president for a one-year term.

The amendments also set the term of office for elected board members at three years and limit the number of terms to three, for a maximum total of nine years service. In approving the amendments, the house expressed the opinion that enlargement of the Board of Trustees "would improve communications between the board and the association" and that the proposed changes "would be consistent with the increase in membership of the association and with the increase of the size of the House of Delegates."

AMA Sections and Scientific Program

In considering the report of the ad hoc committee to study the board of trustees report on the Sections and Scientific Program of the AMA, originally presented at the 1962 clinical meeting in Los Angeles, the house disagreed wth some recommendations in both of those reports.

Major change was the house decision that all section officers—chairman, vice chairman, delegate, alternate delegate, secretary, assistant secretary and representative to the scientific exhibits—should be elected by members of the section and that no officers be appointed by the AMA board of trustees.

In another change, relating to nominations for specialty boards, the house approved the following recommendation: "The Committee of the Council on Scientific Assembly of the appropriate section shall nominate the AMA representatives to serve on the medical specialty certifying board. These nominations shall be submitted to the Board of Trustees."

In connection with section registration, the house decided that "a member of a section who desires to change his registration from one section to another because of a change in his specialty, shall be required to inform AMA headquarters by written notice of this intention at least sixty days in advance of the annual meeting."

The house agreed with the ad hoc committee's recommendation that the Section on Gastroenterology and Proctology, be renamed the "Section on Gastroenterology" and that a separate "Section on Proctology" be established.

The house also commended the Board of Trustees for its recommendation that a national forum be sponsored by the AMA in which representatives of national medical specialty societies and the Academy of General Practice will participate. The Board of Trustees was directed to implement this suggestion as early as possible.

Interns and Residents

The house disapproved the report of the Council on Medical Service and the Council on Medical Education and Hospitals on Compensation of House Officers. In so doing, it adopted the following statement:

"We therefore recommend that in view of the overwhelming opposition to the basic proposal contained in the report of the Council on Medical Service and the Council on Medical Education and Hospitals, the AMA record itself as opposed to any system or program by which any part of an intern's or resident's salary is paid out of fees collected by the attending physician or out of fees collected under any type of medical-surgical insurance coverage."

The house, while declaring that the joint council report "represents a well-intentioned effort to find a solution to a most difficult, if not impossible, problem," recommended that any future proposals on the compensation of house officers be thoroughly studied by the Law Department and Judicial Council before submission to the House of Delegates.

In another action, related to the controversial "25% rule," the house approved a revision of the Essentials of an Approved Internship which deletes the requirement for any stated proportion of foreign medical graduates and graduates of American and Canadian medical schools as an essential feature of any internship program.

New Research Institute

In acting upon two reports from the AMA Education and Research Foundation, the house approved the foundation's announcement that it will establish and operate a new Institute for Biomedical Research.

The institute will concern itself with intensive and fundamental study of life processes particularly as related to intracellular mechanisms. It will be composed of groups of dedicated, imaginative workers who are capable of significant scientific achievements through the interaction of their intellects and experiences, with unmatched facilities and maximum freedom from external pressures.

The institute will be dedicated to pure, basic, non-disease oriented research, and it will not render medical service to patients and will not conduct a graduate training program leading to a degree. It is contemplated that the first research group should be functioning by early 1965.

Physicians' Pension Plan

The House approved establishment of an AMA physicians' pension plan under the provisions of the Self-Employed Individuals' Retirement Act of 1962, and noted that the Board of Trustees will make every effort to begin operation of the plan before the end of 1963 so that physicians will be able to participate this year.

The plan will be open to all AMA members and their employees who can qualify under the Act, Public Law 87-792 (Keogh Law).

The law allows a self-employed individual to set aside up to $2,500 or 10% of his annual income, whichever is less, in a retirement fund, with the first $1,250 being deductible. The individual must provide proportionate benefits for any employee who works for him more than 20 hours a week and more than five months each year.

Tobacco and Disease

The House agreed with a Board of Trustees report which concluded that the AMA should defer any definitive statement regarding the relationship of tobacco and disease. The report pointed out that the AMA is continuing its study of this important subject and is merely deferring any public pronouncement pending the availability of more information, including whatever may come from the study of a committee appointed by the United States Public Health Service.

In taking this action, the house declared that extensive research is still necessary for the com-

plete answers on the cause and effect of many toxins, including tobacco. However, the house said that the AMA "has a duty to point out the effects on the young of the use of toxic materials, including tobacco, and these facts should be disseminated, particularly in our schools."

Miscellaneous Actions

In considering a wide variety of resolutions and reports, the house also:

Disapproved a Judicial Council opinion on the dispensing of glasses by ophthalmologists "solely for profit" and reaffirmed the Council's interpretation of Section 7 of the Principles of Medical Ethics, which provides that "drugs, remedies, or appliances may be dispensed or supplied by the physician providing it is in the best interests of the patient."

Approved a Judicial Council opinion on physician ownership of drugstores, drug repackaging houses and pharmaceutical companies which held that it is unethical for a physician to have a financial interest in a drug store, drug repackaging company or to own stock in a pharmaceutical company which he can control or does control while actively engaged in the practice of medicine.

Approved of AMA participation in the recent formation of a Joint Commission on Medicines and Pharmacy.

Agreed with the Council on Legislative Activities that the house should take no official position on the "Liberty Amendment" but should call it to the attention of individual physician citizens.

Disapproved of federal funds for staffing new community mental health centers.

Took a position opposing the student loan provisions of the Health Professions Educational Assistance Act of 1963.

Urged all state and county medical societies to adopt and activate all phases of "Operation Hometown."

Recommended that local medical societies in the vicinity of medical schools assume the responsibility of establishing and maintaining clear lines of communication with medical students.

Approved the organization of the new National Council for the Accreditation of Nursing Homes, jointly sponsored by the AMA and the American Nursing Home Association.

Adopted the recommendations of the Committee to Study the Joint Commission on the Accreditation of Hospitals and suggested that the committee's report be distributed to constituent and component societies and hospital chiefs of staff.

Approved an alteration in the Association Bylaws which states: "The Council on Medical Education and Hospitals shall consist of 10 active or service members at least one of whom shall be a private practitioner of medicine who is not a faculty member of a medical school nor a member of a staff of a hospital associated with a medical school or university."

Commended the American Farm Bureau for its vigorous leadership in opposing unwarranted government interference and regulation.

Urged the widest dissemination to AMA members of a joint report by the AMA Council on Mental Health and the National Academy of Sciences-National Research Council on The Use of Narcotic Drugs in Medical Practice and the Medical Management of Narcotic Addicts.

Recommended that all AMA members and affiliates give strong support to the national tuberculin testing campaign proposed by the American School Health Association.

Directed the speaker of the house to appoint an ad hoc committee to study the size, make-up and functions of the House of Delegates, its councils, sections and committees and to report its findings in June, 1964.

Opening Session

Dr. George M. Fister of Ogden, Utah, retiring AMA president, told the opening session that "our fight against federal dictation is not merely one of concern only to physicians and their freedom to practice the best medicine possible, but it also concerns, equally or more so, the individual citizen, all professions and the private enterprise system in this country." Awards announced were the AMA Scientific Achievement Award to John F. Enders, Ph.D., Boston, and the Joseph Goldberger Award in Clinical Nutrition to Dr. John B. Youmans, New York City.

Inaugural Ceremony

Dr. Annis, in his inaugural address, stressed the importance of maintaining an attitude of individualism among the physicians of America, and he urged members of the profession to have the courage and individuality to fight for all political, economic and professional freedoms. The Distinguished Service Award was presented to Dr. Dragstedt, and the Scientific Achievement Award was presented to Dr. Enders.

Wednesday Session

Speaking at the Wednesday session, Dr. Annis declared that "now, more than ever before, there is an obligation for all of us to waive or at least to minimize any differences between or within regions, specialties or organizations and to stand together on fundamental principles of medical care and medical practice, of enterprise and of freedom for which our great association has striven in the last 116 years."

Election of Officers

In addition to Dr. Welch, the new president-elect, the following officers were named at the closing session on Thursday:

Dr. D. F. Ward, Dubuque, Iowa, vice-president; Dr. Milford O. Rouse, Dallas, Texas, speaker of the house, and Dr. Walter C. Bornemeier, Chicago, vice-speaker.

Dr. Percy Hopkins, Chicago and Dr. Raymond M. McKeown, Coos Bay, Oregon, were re-elected

to the Board of Trustees for three-year terms. Dr. Robert C. Long, Louisville, Kentucky, was named to fill the one year remaining in the term of Dr. Hugh H. Hussey, who resigned to become director of the AMA Division of Scientific Activities.

Elected to the three new posts on the board, created by the house action on Wednesday, were Dr. Dwight Wilbur of San Francisco, three years; Dr. Bibler, two years, and Dr. L. O. Simenstad, Osceola, Wisconsin, two years.

Nominated and elected to the Judicial Council was Dr. Walter Judd, Minneapolis, physician, former member of Congress and 1961 winner of the AMA Distinguished Service Award.

For the Council on Constitution and Bylaws, Dr. William D. Stovall, Madison, Wisconsin, was re-elected, and Dr. Thurman B. Givan, Brooklyn, New York, was named to replace Dr. Bornemeier.

Elected to the Council on Medical Education and Hospitals were Dr. E. Bryce Robinson, Jr., Fairfield, Alabama; Dr. Land and Dr. Melvin Breese, Portland, Oregon.

To fill vacancies in the Council on Medical Service, the house elected Dr. Burns A. Dobbins, Jr., Fort Lauderdale, Florida; Dr. Irvin E. Hendryson, Denver, Colorado, and Dr. Jess W. Read, Tacoma, Washington.

By acclamation at the opening session, the house also expressed appreciation for the services of Mr. C. Joseph Stetler, the association's general counsel and director of the Legal and Socio-Economic Division, who will be leaving July 1st to become executive vice-president and general counsel of the Pharmaceutical Manufacturers Association.

HAROLD C. OCHSNER, M.D.
E. S. JONES, M.D.
FRANCIS L. LAND, M.D.
WALTER L. PORTTEUS, M.D.
JACK E. SHIELDS, M.D.

Reports of Committees

Executive Committee

The activities of the Executive Committee for the past year reveal that meetings were held regularly each month. The average time of an Executive Committee meeting is approximately five hours because of the large volume of business to be transacted. Minutes of all the meetings have appeared in *The Journal* and for this reason the committee's actions should be well known to all the membership of the Association. Copies of the minutes of each of the Executive Committee meetings have been supplied to the Reference Committee for their review.

The past year has seen no let up in the activities and functions of your Association which have required considerable time and action by your Executive Committee. All matters coming before the Executive Committee which could be delayed until the meeting of the Council have been referred to the Council for their decision rather than by the Executive Committee. Many times, however, the Executive Committee has taken the liberty of reporting its findings and making its recommendation to the Council. Throughout the year the Executive Committee has counseled with the commission chairmen and others and has approved, or disapproved, of suggested policies in keeping with the high aims and purposes of our Association.

Because it meets every month, the committee is called upon to handle a variety of details necessary to the administration of our professional organization of more than 4,300 members. This work takes the committee into the field of finance and management, as well as policy-making and during the past year many problems incident to the operation of our new headquarters building have been added to the responsibilities of the committee.

The committee has met with the members of the Indiana delegation in Congress for the discussion of matters of interest to the profession of our Association and to the health of the people of our community.

In addition, during this past year the 1963 session of the Legislature was held, and the committee was called upon many times to consult with the Commission on Legislation regarding policy decisions to be made affecting such legislation appearing before the Legislature. Elsewhere in the reports before this House you will find the report of the Commission on Legislation which goes into great detail, showing the accomplishments of the Association in this field during the past year. We feel this record is to be highly commended by all the members of the Association as this commission deserves much credit for the untiring efforts they put forth in carrying on a successful program.

The committee, also during the past year, consulted on various occasions with the Woman's Auxiliary to the Indiana State Medical Association, reviewing with them their program and needs and advising them on various matters affecting the operation of the auxiliary in their various fields of activity. The women who comprise the auxiliary are industrious and enthusiastic and have contributed much to the improvement of the overall public relations and other programs of the Association. Our members owe their wives who comprise the auxiliary many thanks for the work they have done in behalf of the medical profession.

Recently the Executive Committee was invited by the Governor to meet with him, the Medical Registration Board, the head of the Department of Corrections, head of the Department of Mental Health, and the State Health Commissioner for a discussion of medical problems in state institutions. This meeting was rewarding in that it was exploratory as to what can be done to assist the state of Indiana in bettering the medical facilities in state institutions. We doubt that the results will be available by the time this House of Delegates meets, but our Commission on Governmental Medical Services, which has liaison on all government medical projects, will undertake a study of the correctional system in this state to see what can be recommended for improvement of medical care in these institutions.

Your committee thought this year a report might be made which would be of some interest to the delegates and the membership which will give you a look at your Association for the past 20 years. It is interesting to note that in 1943 our membership totaled 3,093; ten years later in 1953, our membership amounted to 3,820 (or a 23% increase in that ten-year-period). At the close of 1962, our membership figure was 4,345, which indicated an increase during the last ten years of 14%. For the 20-year-period from 1943 to the close of 1962, we have shown a 42% growth in membership in our Association.

The Journal

The constantly increasing cost of producing *The Journal* has posed many problems of finance during the past few months. The fact that the House last year allocated an additional $5.00 per member to *The Journal* will greatly ease the financial problem of publishing this fine journal and will help offset the deficit of the operation of this department. Again to give you some idea of the problems which have been faced during the past with relation to *The Journal*, we thought you might be interested in making a comparison for the past twenty years of *The Journal's* operation.

In 1943 we published a total of 1,252 pages; in 1953 *The Journal* contained 1,546 pages for an increase of 23% in page content during this ten-year-period. In 1962 *The Journal* contained a total of 1,912 pages, with a 24% increase in page content during the ten years from '53 to '63. The overall change in *The Journal* content from 1943

to 1963 has amounted to 53% increase in pages of reading matter and advertising.

A comparison of printing cost for the same period, we think, would be of great interest to you to give you an idea of the tremendously increased cost of publishing our magazine. It can be said here that this increased cost does not affect only your medical *Journal* but has also affected all publications. In 1943 it cost us $9,515.47 to publish *The Journal;* in 1953, it cost us $29,531.61 for an increase of 210%. In 1962 our printing cost amounted to $54,473.79 for an increase of 84% in the ten-year-period from 1953 to 1963. Over the 20-year-period printing costs have risen 472%.

Breaking this down further to the cost per page, in 1943 our cost per page was $7.60; in 1953 it was $19.10, an increase of 151%. In 1962 our cost per page was $28.49, or an increase of 49%, making our overall percentage increase for 1943 to 1963 at 275% increase.

Let's take a look now at the advertising income. In 1943, we took in $11,964.93 in advertising support for *The Journal*, in 1953, we took in $12,702.22, an increase of 16%; in 1962, we took in $40,565.54, an increase during this past ten years of 219%, our overall increase in advertising percentage from 1943 to 1963 has amounted to 239%.

It is also interesting to note that our advertising income on a per page basis of *The Journal* was $9.56 per page on the average in 1943; in 1953, our average advertising income per page published amounted to only $8.22; in 1962, our advertising income per page amounted to $21.22.

We believe these above figures are indicative of many of the problems which have been faced by you, the officers of your Executive Committee, in the continued operation of *The Journal* during the past several years. The editor of *The Journal* and the staff have been doing everything in their power to hold down production costs which we believe will be reflected at the year end report for this operation. Many economies have been introduced and others will be introduced in the future to further bring *The Journal* operation costs within the income produced by *The Journal.* It is interesting to reveal that, while *The Journal* has suffered losses during the past few years, the losses have not been out of line and in some instances have been less than those suffered by other major medical publications. There has been a great reduction in pharmaceutical company advertising, largely blamed on the recent Kefauver hearings and the criticism of the money which drug manufacturers were spending to promote their products. It is hopeful that as time goes on, the situation will ease and our *Journal* will again enjoy the benefits of increased advertising income from our major drug firms.

Medical Defense Activities

1. *Malpractice cases.* A year ago, at the time of this report, August 1, 1962, the following two cases were pending before the committee and were closed during the year:

Case No. 303—(Closed.) Filed September 16, 1961. Settled February, 1963. (Expense, $2,811.06, paid February, 1963).

Case No. 304—(Closed.) Filed June 20, 1961. Settled with damages awarded. (Expense, $960.00, paid May 30, 1963.)

Since August 1, 1962, and up to August 1, 1963, the following case was filed and closed:

Case No. 306—(Closed.) Suit threatened, October, 1962, but never filed. Case closed, February, 1962. (Expense, $50.00, paid February, 1963.)

No cases are pending at the present time.

2. *Medical Defense Fund Statement from August 1, 1962 to August 1, 1963:*

Bank Balance, August 1, 1962		$1,824.04
Due from General Fund	$7,953.79	
less Treasury Bond #25120	5,000.00	
		2,953.79
		$4,777.83
Receipts:		
Dues	$4,639.00	
Interest	354.17	
		4,993.17
Total Receipts		$9,771.00
Disbursements:		
Reimbursement for Legal Defense	$3,821.06	
Attorneys' Retainer	2,790.00	
Total Disbursements		6,611.06
Balance on hand August 1, 1963		$3,159.94

Membership Report

	Dec. 31, 1962	July 31, 1962	July 31, 1963	Delinquent	AMA, 1963
1st District					
Gibson	15	15	16		16
Perry	13	13	12		12
Pike	4	4	4		4
Posey	10	10	10		10
Spencer	6	6	5		4
Vanderburgh	235	233	237		234
Warrick	11	12	9		10
TOTAL	294	292	293		290
2nd District					
Daviess-Martin	19	19	20	1	19
Greene	16	16	16		9
Knox	41	41	41		39
Owen-Monroe	58	58	62	1	57
Sullivan	15	15	15		13
TOTAL	149	149	154	2	137

	Dec. 31, 1962	July 31, 1962	July 31, 1963	Delinquent	AMA, 1963
3rd District					
Clark	38	38	38		37
Dubois	24	24	23		18
Floyd	40	40	38		37
Harrison-Crawford	13	13	11		11
Lawrence	25	28	24		22
Orange	9	9	9		9
Scott	3	3	4		3
Washington	8	8	8		8
TOTAL	160	160	155		145
4th District					
Bartholomew-Brown	41	41	43		42
Dearborn-Ohio	22	22	22		18
Decatur	12	12	12		10
Jackson-Jennings	24	24	25		22
Jefferson-Switzerland	26	26	25		23
Ripley	9	8	11		9
TOTAL	134	133	138		124
5th District					
Clay	13	13	13		13
Parke-Vermillion	24	23	26		26
Putnam	17	17	16	1	16
Vigo	118	116	116	1	116
TOTAL	172	169	171	2	171
6th District					
Fayette-Franklin	18	18	18		18
Hancock	21	21	20		20
Henry	44	43	42		42
Rush	15	15	15		15
Shelby	18	18	19		19
Wayne-Union	73	72	71	1	66
TOTAL	189	187	185	1	180
7th District					
Hendricks	20	20	22		22
Johnson	30	30	32		32
Marion	1047	1044	1051	3	1049
Morgan	15	15	17		17
TOTAL	1112	1109	1122	3	1120
8th District					
Delaware-Blackford	113	112	115	2	110
Jay	19	19	17		15
Madison	104	104	99	1	95
Randolph	22	22	22	1	19
TOTAL	258	257	253	4	239
9th District					
Benton	9	9	9		8
Boone	18	18	18		18
Clinton	19	19	20		20
Fountain-Warren	16	16	15		15
Hamilton	25	25	26	1	20
Montgomery	26	26	27		27
Tippecanoe	117	117	113	5	113
Tipton	11	11	11		11
White	12	12	11		11
TOTAL	253	253	250	6	243
10th District					
Jasper-Newton	12	12	12		12
Lake	430	417	415	14	392
Porter	29	29	33		33
TOTAL	471	458	460	14	437
11th District					
Carroll	9	9	9		9
Cass	40	40	39		37
Grant	67	67	68		68
Howard	59	59	64		63
Huntington	24	24	23		22
Miami	14	14	13		12
Wabash	26	26	25		24
TOTAL	239	239	241		235
12th District					
Adams	14	14	13	1	13
Allen	275	271	276		275
DeKalb	19	19	20		20
LaGrange	10	10	10		10
Noble	16	16	16		16
Steuben	14	14	13		13
Wells	35	35	33	1	34
Whitley	21	21	19	1	19
TOTAL	404	400	400	3	400
13th District					
Elkhart	109	109	108	2	106
Fulton	11	11	11		11
Kosciusko	18	17	17		16
LaPorte	94	94	98		96
Marshall	26	26	26		25
Pulaski	6	6	6		5
St. Joseph	235	232	236		236
Starke	6	6	6		6
TOTAL	505	501	508	2	501
SUMMARY					
1st District	294	292	293		290
2nd District	149	149	154	2	137
3rd District	160	160	155		145
4th District	134	133	138		124
5th District	172	169	171	2	171
6th District	189	187	185	1	180
7th District	1112	1109	1122	3	1120
8th District	258	257	253	4	239
9th District	253	253	250	6	243
10th District	471	458	460	14	437
11th District	239	239	241		235
12th District	404	400	400	3	400
13th District	505	501	508	2	501
TOTAL	4340	4307	4330	37	4222

The Journal

Advertising

This is a comparative report for the first six months of each year indicated.

State Journal Advertising	1960	1961	1962	1963
Bureau	$33,314.83	$23,697.85	$21,538.08	$16,782.08
Sold Direct by Journal	2,501.98	1,976.08	2,013.00	1,950.60
Total	$35,816.81	$25,673.93	$23,551.08	$18,732.68

Printing Cost

Year	Cost	No. of Pages (Inserts excluded)
1959	$63,841.30	2243
1960	62,679.13	2222
1961	49,539.57	1868
1962	51,291.51	1862
1963 (6 months)	22,489.27	828

Year	Reading	% Reading	Adv. Pages	% Adv. Pages	Total Pages	Adv. Pages per Issue
1958	1055	52	969	48	2024	169
1959	1226	53	1088	47	2314	192.9
1960	1413	61	919	39	2332	194
1961	1284	67	634	33	1918	160
1962	1308	68	604	32	1912	159

WENDELL E. COVALT, M.D., *Chairman*
RALPH V. EVERLY, M.D.
MAURICE E. GLOCK, M.D.
DON E. WOOD, M.D.
K. O. NEUMANN, M.D.
IRVIN W. WILKENS, M.D.

Grievance

The Grievance Committee held meetings on October 10, 1962 and June 30, 1963. As of July 1, 1963, 11 cases had been considered during the fiscal year and 13 cases closed.

Our procedure has remained essentially unchanged for the past four years after evolving during several preceding years. This plan has materially decreased the number of complaints that are adjudicated at the state level. In essence the steps employed are: (1) The request of permission from the complainant to forward a full copy of the complaint to the physician or physicians named. Failure to give permission terminates consideration of the complaint. (2) A suggestion to the physician against whom a complaint is lodged that he personally attempt to settle the matter with the complaining party. (3) Should the physician not be successful or decline to act we ask that the issues involved be considered by the county society and (4) only when the county society declines adjudication or is unable to resolve the problem does the ISMA Grievance Committee proceed. In exceptional cases the physician involved may ask that the ISMA Grievance Committee attempt to resolve the matter rather than proceeding at the county level.

We wish to here remind all county medical society secretaries of the action of the 1962 ISMA House of Delegates which directs that a report be promptly sent to the ISMA Grievance Committee of any disciplinary action taken at the county level.

The Grievance Committee thanks ISMA members who as individuals or committee members responded promptly to the requests we were required to make during the past year in discharging our assigned responsibility.

Finally we wish to add our word of tribute for the late Dr. Harry R. Stimson who after effectively serving as President of ISMA became Vice-Chairman of this committee and so served until his untimely death.

PHILIP B. REED, M.D., *Chairman*
MARVIN L. McCLAIN, M.D., *Secretary*
RAYMOND E. NELSON, M.D.
EARL W. MERICLE, M.D.
GUY A. OWSLEY, M.D.
H. ALLISON MILLER, M.D.
PAUL L. STIER, M.D.
WILLIAM H. NORMAN, M.D.
WILLIAM R. CLARK, M.D.

Student Loan

The financial status of the Student Loan Fund for ten months of the fiscal year 1962-63 is shown by the following report:

Cash on hand, October 1, 1962	$ 636.69
Receipts:	
Repayment on loans, 10/1/62 through 7/31/63	5,066.80
Interest earned on loans	321.96
Donations	39.00
TOTAL RECEIPTS	$6,064.45
Expenditures:	
Loans granted, 10/1/62 through 7/31/63	5,650.00
Cash on hand, July 31, 1963	$ 414.45

Fifteen loans, totaling $5,650.00, were granted during the period October 1, 1962 through July 31, 1963, and $5,066.80 in repayments have been received.

As of July 31, 1963, loans outstanding total $40,846.58.

During the year the committee, with the assistance of the attorney for the Association, has succeeded in collecting $1,765.00 on overdue accounts. At this time there is still $2,825.00 outstanding in delinquent accounts. Pressure is being brought on these delinquents to pay.

Since the Student Loan program was instituted, 142 loans totaling $58,458.36 have been granted to 117 students:

93 students have received 1 loan each;
23 students have been granted 2 loans each;
1 student has received 3 loans.

As of July 31, 1963, 24 recipients of loans have repaid their loans in full; 12 have made partial payments, the total repayments being $17,754.81.

The review of the financial transactions in the Student Loan Fund since its establishment by the House of Delegates in October, 1955, follows:

Receipts:		
Funds transferred from General Fund, as authorized by the House of Delegates		$40,000.00
Donations		345.03
Interest		1,127.54
TOTAL RECEIPTS		$41,472.57
Expenditures:		
Printing	$ 211.54	
Total loans outstanding through July 31, 1963	40,846.58	
TOTAL EXPENDITURES		$41,058.12
BALANCE IN FUND, JULY 31, 1963		$ 414.45

Interest on loans begins on completion of internship. From time to time the House of Delegates has changed the interest rate. Loans granted prior

to October 15, 1958, bore interest of 3½%; starting October 15, 1958, the rate was increased to 6%. In October, 1960, the House of Delegates authorized a 2% interest rate. In this regard, the Committee on Student Loan offers the following resolution, which was approved by the Council at its meeting on April 28, 1963:

WHEREAS, at present a student loan is without interest until: (a) withdrawal from medical school, (b) withdrawal from hospital internship, or (c) the completion of internship, and thereafter, including those notes past due, bears only 2% interest per annum, and

WHEREAS, the very low interest rate after maturity has acted as a deterrent or obstacle to collection and thereby has deprived the fund of moneys to lend to other medical students in need, and

WHEREAS, this committee believes that it would facilitate collecting said notes at maturity if the interest rate after maturity be increased, as an incentive to the borrower to make payment and thereby keep the fund revolving,

IT IS THEREFORE recommended that said loans mature:

(a) One (1) month after ceasing to be an enrolled medical student, or
(b) One (1) month after withdrawal from hospital internship, or
(c) Twelve (12) months after completion of internship.

That they bear 4 percent simple interest per annum for one (1) year after maturity and 6 percent simple interest thereafter until paid, with attorney fees in the event suit becomes necessary to compel collection.

Your committee has endeavored to function to the best interest of all concerned. It feels that the Association is rendering a valuable service to students who need assistance in completing their medical education.

LESTER D. BIBLER, M.D., *Chairman*
MAURICE E. GLOCK, M.D.
IRVIN W. WILKENS, M.D.
JOHN D. VAN NUYS, M.D.
KENNETH O. NEUMANN, M.D.
JAMES O. RITCHEY, M.D.
ROBERT HOLLOWELL, *Attorney*

Reports of Commissions

Constitution and Bylaws

The Commission on Constitution and Bylaws, having held several meetings during the year, recommends the following changes in the Constitution and Bylaws of the Indiana State Medical Association:

Constitution

(1). BE IT RESOLVED; that Article II of the Constitution of the Indiana State Medical Association be amended by deleting therefrom the following words "and to secure the enactment and enforcement of just medical laws."

The purpose of this amendment is to prevent any possible contention from the standpoint of federal taxability that political and legislative activity is such a purpose of the Association that it would affect its tax exempt status.

As amended, said Article II would read as follows:

"The purpose of this Association shall be to federate and bring into one compact organization the medical profession of the State of Indiana, and to unite with similar societies of other states to form the American Medical Association; to extend medical knowledge and advance medical science; to elevate the standard of medical education to promote friendly intercourse among physicians; to protect members against imposition; and to enlighten and direct public opinion in regard to the great problems of medical care, and public health, so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of diseases and in prolonging and adding comfort to life."

(2). BE IT RESOLVED; that Section 4 of Article IV of the Constitution of the Indiana State Medical Association be amended by deleting therefrom the last grammatical paragraph which reads as follows:

"All members who, previous to the adoption of this amendment to the Constitution, were certified as honorary members on the basis of the above qualifications, shall hereafter be classified as senior members" for the reason that said paragaph is no longer applicable to any existing situation.

(3). BE IT RESOLVED; that Section 6 of Article IV of the Constitution of the Indiana State Medical Association be amended by adding thereto immediately following subsection b, a new subsection to be numbered c, as follows:

"c. Senior members who desire the benefit of medical defense as provided by the Bylaws of this Association shall pay the amount stipulated in Section 1, Chapter XXIX of the Bylaws for this coverage."

Then renumber the present sub-paragraph "c" as sub-paragraph "d."

The purpose of this amendment is to clarify some existing confusion as to whether or not senior members are entitled to medical defense.

(4). BE IT RESOLVED; that Article V of the Constitution of the Indiana State Medical Association be amended by inserting after the word "treasurer" the words "and assistant treasurer."

The purpose of this amendment is to make the assistant treasurer an ex-officio member of the House of Delegates without power to vote.

(5). BE IT RESOLVED; that Article VI of the Constitution of the Indiana State Medical Association be amended by inserting after the word "vote" in the first sentence and before the period the words "and assistant treasurer without power to vote except in case the treasurer be absent."

The purpose of this amendment is to make the assistant treasurer an ex-officio member of the Council without power to vote except in the absence of the treasurer.

(6). BE IT RESOLVED; that Article VI of the Constitution of the Indiana State Medical Association be amended by deleting therefrom the words "and at all times shall be the finance committee of the Association."

This Article VI constitutes the Council as the Board of Trustees having full charge and control of all the property of the Association. It is provided by Chapter 31 of the Bylaws that the investment of all surplus funds of the Association shall be under the direct control and management of the Executive Committee, subject to instructions which may be given it by the Council at its option.

Also, Section II of Chapter 9 of the Bylaws provides that the Executive Committee shall prepare a budget for the ensuing fiscal year.

The above provision of Article VI of the Constitution that the Council shall be the finance committee has produced confusion upon occasions when construed with the above mentioned sections of the bylaws. It has been generally interpreted that, as the finance committee, the function of the Council was to devise means for financing the activities of the Association, subject to such matters as are vested in the House of Delegates by the Constitution, such as the fixing of membership dues. The Council would have jurisdiction under the first part of said Article VI to devise such means of financing, and the elimination of this provision would prevent the confusion that sometimes arises as above set forth.

(7). BE IT RESOLVED; that Section 2 of Article VIII of the Constitution of the Indiana State Medical Association be amended by deleting the word "two" in the first sentence of said Section and by substituting in lieu thereof the word "five." Many associations and organizations are selecting their places of meetings and making reservations as much as five years in advance, and unless this Association does likewise it may be difficult to arrange for a suitable and adequate

meeting place and to make the necessary reservations therefor for the dates desired.

(8). BE IT RESOLVED; that Section 3 of Article VIII of the Constitution of the Indiana State Medical Association be amended by adding thereto the following sentence, "Upon receipt by the president of such a petition of twenty delegates, or fifty members, the president shall within 30 days thereafter issue a call for such special meeting at a time and place to be fixed by the president. The president, in specifying the time of such special meeting, shall fix the same as soon thereafter as reasonable and suitable arrangements can be made."

The purpose of this amendment is to clarify the question as to the fixing of the time and the place of the holding of such special meetings and to require the call and notice to the members to be made within 30 days after the president receives a valid petition.

(9). BE IT RESOLVED; that Section 1 of Article IX of the Constitution of the Indiana State Medical Association be amended by inserting after the comma, following the word, "treasurer" in said section the following "assistant treasurer."

For a number of years the House of Delegates has been electing an assistant treasurer; the purpose of this amendment is to make the office of the assistant treasurer constitutional and official.

(10). BE IT RESOLVED; that Section 3 of Article IX of the Constitution of the Indiana State Medical Association be amended by deleting therefrom the words "of the last day of the Annual Convention" and substituting in lieu thereof the following words "at the final meeting of the House of Delegates."

The purpose of this amendment is to make it possible to have the final meeting of the House of Delegates on a day other than the last day of the annual convention in order to permit arrangements to be made to coordinate the business sessions and the scientific sessions in a better way.

(11). BE IT RESOLVED; that Section 8 of Article IX of the Constitution of the Indiana State Medical Association be amended by inserting after the word "treasurer" the words "or assistant treasurer."

(12). BE IT RESOLVED; that Article XI of the Constitution of the Indiana State Medical Association be amended as follows: by inserting immediately after the word "the" and before the "Council" in the last sentence of said Article the following words "Executive Committee and."

Under the bylaws the Executive Committee makes up the budget and the purpose of this amendment is to require any appropriation proposed to be made by the House of Delegates to be first submitted to the Executive Committee in order that it may consider its effect upon the total budget of the Association before final action thereon is taken by the House of Delegates.

These changes in the Constitution are to be acted upon at this session of the House and will lay over for final action by the House until 1964 session; meantime, these will be published twice during the year in *The Journal.*

If these changes are formally adopted by the House they will necessitate appropriate changes in the bylaws and such changes will be prepared for presentation at the 1964 meeting, at which time the final action is taken on the proposed amendments to the Constitution.

Bylaws

(1). BE IT RESOLVED; that Section 5 of Chapter VI of the Bylaws be amended as follows: immediately following the word "imposed" the words "may be allowed by the Council" shall be deleted and substituted in lieu thereof the following: "shall be allowed for in the budget."

The reason for this is inasmuch as the budget for the past several years has allowed for the expenses of the officers of the Association, this correction is being made to bring the bylaws into conformity with the practices of the Association.

(2). BE IT RESOLVED; that Section 4, Chapter XXVI of the Bylaws be amended as follows: near the end of the first sentence immediately following the words "shall be" and before the word "membership," the words "entitled to" shall be deleted and substituted in lieu thereof shall be the words "eligible for."

The reason for this—there are situations in which a physician might meet the other qualifications set forth in this section and still he would not be considered entitled to membership by his component county medical society. Therefore, in place of making it so specific that the man is entitled to membership it specifies that he is eligible for membership subject to the approval of his county medical society.

(3). BE IT RESOLVED; that Section 12, Chapter XXVI, third paragraph, of the Bylaws of the Indiana State Medical Association be amended as follows: in the last sentence immediately following the word "pay" the following words shall be deleted, "$10.00 a year annual dues" and substituted in lieu thereof shall be the words "fifty percent of the annual dues."

G. O. LARSON, M.D., *Chairman*
GORDON S. FESSLER, M.D., *Vice-Chairman*
A. W. CAVINS, M.D., *Secretary*
WILLIAM B. CHALLMAN, M.D.
JAMES N. TOPOLGUS, M.D.
THOMAS H. GOOTEE, M.D.
HOWARD E. SWEET, M.D.
JOSEPH F. FERRARA, M.D.
GLYNN A. RIVERS, M.D.
WILLIAM M. SHOLTY, M.D.
JOSEPH J. SALA, M.D.
LOWELL J. HILLIS, M.D.
HAROLD NUGEN, M.D.
JOHN B. CLEVELAND, M.D.
BURTON KINTNER, M.D.

Legislation

Your Legislative Commission has been a very active organization since the last state meeting in October. It organized immediately, and began to prepare for the Legislature and Congress.

The first action of the Legislative Commission was a meeting in conjunction with the Indianapolis Chamber of Commerce which was held in January, 1963. The commission hosted members of the health committees of both the House and the Senate at a reception prior to dinner.

Following the start of the Legislature, the commission met regularly at least every other week, with various members of the Legislature invited for lunch and to counsel with us. The commission members were also active in other facets, some of them testifying before various committees of the House and the Senate, some preparing material for members of the Legislature, and some contacting the Governor in regard to the status of certain legislation. The commission felt that one of its most important responsibilities was to listen to the problems of the different medical groups, and to coordinate their opinions in the ISMA program.

After the close of the Legislature, with a 100% box score in our favor, we felt that we had had a very successful legislative program. As many of you know, a special session of the Legislature was called, and after deep and serious consideration of the commission, it was decided that we would not be active in the special session since it was basically for reapportionment and taxation. A box score of the pertinent legislation follows:

During the regular session of the Indiana General Assembly, the medical profession enjoyed perhaps its most successful legislative year in recent history. This is predicated on the fact that 40 bills favored or supported by the ISMA were adopted by both houses, while, on the other hand, 26 measures opposed by the profession failed to become law. It was a 100% "batting average."

In the matter of assigning "credit" for this achievement three major points come to mind: (1) the dedicated concern of two physician members of the Assembly—Representative Otis R. Bowen, chairman of the public health committee of the House, and Senator James M. Kirtley; (2) the hard work of the Commission on Legislation which met almost weekly during the session, in addition to many telephone conferences; (3) the cooperation from many members of the Association and its auxiliary when appeals for "grass roots" help were made.

In former years the success or failure of the ISMA legislative program hinged to large extent on what happened to the chiropractic bill. In recent years, with medicine involved in so many matters of concern for the health and welfare of the citizenry, the chiropractic issue has, perhaps, taken a "back seat." In any event, history was made in the 1963 session because no bill was introduced for a separate licensing board for chiropractors.

Major disappointment as far as the profession was concerned was the governor's veto of Kerr-Mills implementation which had been passed by resounding pluralities in both houses. The governor based his veto on the assumption that "Kerr-Mills is not needed in Indiana" despite the fact that its need to bolster and strengthen the existing "medical only" program under OAA was demonstrated in written and personal communication on several occasions.

The following summary, while presenting a "bird's-eye" view of measures of medical concern, does not—or can it—tell the story of the "blood, sweat and tears" of all hands concerned in the 1963 session.

No. of Bill	Title	ISMA Position	Final Action
SB 6	Provides Legislative Committee to review state administrative rules, such as Medical Board	Opposed	Failed to override Governor's veto
SB 15	Tightens up keeping of birth certificate record	Favor	Passed
SCR 1	Asks police officers not to transport mental patients; guards not to wear arms unless patient is violent	Favor	Passed
SB 23	Would give towns more regulatory power in matters of public health	Opposed	Did not move
SB 129	Creates Legislative Committee to monitor licensing agencies	Opposed	Did not move
SB 132	Kerr-Mills Implementation	Favor	Passed, vetoed
SB 142	Gives medical benefits under Workmen's Compensation to volunteers at mental hospitals	Favor	Passed
SB 150	Recodify laws applicable to occupational diseases	Favor	Passed
SB 154	Directs clinical labs to report TB findings to Board of Health	Favor	Passed
SB 158	Allows "competent citizens" to issue affidavits for arrest of mentally ill	Opposed	Did not move
SB 187	Calls for seat belts in autos after 1964	Favor	Passed
SB 188	Upgrades laws for county hospital construction	Favor	Passed
SB 199	Designates Rockville TB hospital as "Indiana State Hospital for Chest Diseases"	Favor	Passed
SB 200	Comparable designation (see above) for TB Hospital at New Albany	Favor	Passed
SB 205	Permits county hospital to fix interest charges on delinquent accounts	Opposed	Stayed in committee
SB 209	Provides certain changes in Corporate Surety Bonds for county hospitals	Favor	Passed
SB 214	Requires mandatory TB tests for persons who resist established procedures	Favor	Passed
SB 229	Permits physicians to be members of four-member county hospital boards	Favor	Passed
SB 259	"Good Samaritan Bill"	Favor	Passed

No. of Bill	Title	ISMA Position	Final Action
SB 271	Allows judge to order temporary commitment of persons to nearest psychiatric hospital for examination	Opposed	Did not move
SB 285	Widens scope of chest treatment in TB hospitals	Favor	Passed
SB 303	Tightens drunken driving law; includes narcotics addiction	Favor	Passed
SB 309	Provides new benefits for the blind	Favor	Passed
SB 316	Loosens regulations for examination of mental patients	Opposed	Stayed in committee
SB 368	Allows hospitals to recover for accident cases under certain conditions	Opposed	Stayed in committee
SB 385	Loosens welfare law in matter of estate recovery	Opposed	Did not move
SB 398	Professional Medical Corporation	Favor	Passed
SB 411	Changes established poor relief law	Opposed	Failed passage
SB 442	Licensing of health facilities, excluding hospitals	Favor	Passed
SB 477	Provides confidentiality of hospital records	Favor	Passed
HB 1017	Welfare lien law change in procedures of collection	Opposed	Stayed in committee
HB 1020	Clarifies procedures in criminal cases involving insane	Favor	Passed
HB 1023	Provides beneficial technical changes in release of mental patients	Favor	Passed
HB 1024	Provides more court protection for released mentally retarded children	Favor	Passed
HB 1039	Tightens barber license law re health standards	Favor	Passed
HB 1041	Creates license board for sanitarians	Favor	Passed
HB 1048	Upgrades procedures for care of dependent children in foster homes	Favor	Passed
HB 1052	Provides certain technical changes in welfare payment for non-residents	Opposed	Stayed in committee
HB 1053	Tightens dentistry licensing law	Favor	Passed
HB 1054	Provides beneficial changes in law regulating dental hygenists	Favor	Passed
HB 1060	Creates licensing control committee for such boards as medical board	Opposed	Did not move
HB 1061	Would allow chiropractors and osteopaths to excuse children from physical education class	Opposed	Did not move
HB 1075	Medical licensure of aliens	Opposed	Did not move
HB 1079	Makes prohibitory changes in licensing of beauty operators	Opposed	Did not move
HB 1108	Calls for transfer of nursing home licensing from Board of Health to Welfare	Opposed	Did not move
HB 1119 & 1120	Provide changes in coroner activities	Favor both	Passed
HB 1129	Makes changes in laws dealing with bequeathment of bodies to medical schools	Favor	Passed
HB 1173	Authorizes beneficial changes in transfer of non-resident indigent TB patients	Favor	Passed
HB 1185	Enables osteopaths and chiropractors to certify physical fitness of athletes	Opposed	Did not move
HB 1195	Authorized county commissioners to furnish aid to centers for mentally retarded	Favor	Passed
HB 1219	Directs Health Board to compile certain statistics on divorces and annulments	Opposed	Failed
HB 1221	In emergencies allows hospitalization of state institution inmates; be hospitalized in other than state-owned hospitals	Favor	Passed
HB 1222	Would put more regulation on county public health departments	Opposed	Stayed in committee
HB 1223 & 1224	Tighten regulations concerning licensing and permits for pharmacists and drug stores	Favor both	Both passed
HB 1241	Would lessen county responsibility for financing of welfare costs	Opposed	Did not move
HB 1242	Establishes unified licensing council for nursing homes, church and lodge homes and hospitals	Opposed	Did not move (see SB 442)
HB 1250	Increases aid for visually handicapped	Favor	Passed
HB 1266	Loosens regulations regarding optometrists	Opposed	Did not move
HB 1308 & 1310	Upgrades educational standards for physically, mentally handicapped children	Favor	Passed
HB 1329	Authorized temporary medical training permits for out-of-state interns, residents	Favor	Passed
HB 1343	Tattoo Bill (outlaws tattooing)	Favor	Passed
HB 1406	Prohibits dispensing of dangerous drugs by coin operated machines	Favor	Passed
HB 1411	Would place Board of Health in regulatory capacity for agricultural labor camps	Opposed	Stayed in committee
HB 1513 & 1522	Would take welfare jurisdiction from separate county board and give to township trustees	Opposed	Neither moved

The Legislative Commission was also active in Congress. We held our annual dinner in Washington in April, with the Indiana Congressional delegation and their staffs as our guests. It was a very successful evening. The officers of your state Association also participated in the Chamber of Commerce reception and dinner. Our reception in Washington was considerably more cordial than the average person realized and we were most happy with our trip.

Your commission has also been active and cooperative with AMPAC and I-HOPE, lending counsel and encouragement to these organizations. Dr. Don Wood, your President-Elect, is now Chairman of AMPAC.

At the AMA Conference on Legislation in Chicago, several of the members of the commission were present and expressed Indiana's opinions in regard to national issues. Several of us also participated in the National Workshop of AMPAC, and some served on the program presided over by Dr. Don Wood. The AMA legislative program, "Operation Hometown" has been activated by the ISMA, and Dr. Annis's film was shown to many societies and district meetings this spring.

This year appears to be a year of the drawing of the lines in regard to the future battles in Congress with regard to the Social Security approach to medical care of the aged. It is felt in many areas that this will not be an issue in Congress this year, since it is believed that it will not be "kicked-out" of the House Ways and Means Committee. But remember, the war has not been won—just a few minor battles or scrimmages!

The commission would be remiss in their duties if they did not praise the work of their state Association staff, Mr. Waggener, Mr. Amick and Mr. Grindstaff. Their organization, activity, and relations with the legislative members are held in high esteem by these men and their fellow lobbyists. The Legislative Commission owes a great portion of its success to Senator James Kirtley, M.D., and Representative Otis Bowen, M.D., for their sincere efforts and counsel regarding legislative matters of the ISMA and health legislation of the State of Indiana. Our sincere thanks to these fine men.

The chairman wishes to acknowledge the fine cooperation of the members of the Legislative Commission and every interested member of the Indiana State Medical Association. Your continued dedication and active participation made this program a success. THANKS!

JOE M. BLACK, M.D., *Chairman*
EUGENE F. SENSENY, M.D., *Vice-Chairman*
JOSEPH G. S. WEBER, M.D., *Secretary*
P. J. V. CORCORAN, M.D.
HAROLD MANIFOLD, M.D.
DON KERR, M.D.
LESLIE M. BAKER, M.D.
PAUL R. TINDALL, M.D.
DWIGHT W. SCHUSTER, M.D.
PAUL T. LAMEY, M.D.
JAMES CRAIN, M.D.
PHILIP ROSENBLOOM, M.D.
DONALD K. WINTER, M.D.
OTIS R. BOWEN, M.D.
DON E. WOOD, M.D.

Public Information

I. *Liaison Committee—Nurses and County Medical Society.*

The Commission asked that each County Medical Society form a special liaison committee between the nurses of their community and the physicians to discuss the socio-economic problems of medical and hospital care of the general public with particular reference to our senior citizens. This liaison committee is essential in lieu of the American Nursing Association being on record favoring King-Anderson type legislation. This stand has been publicized in spite of many individual members of A.N.A. and non members not approving of the action taken by the A.N.A. on the matter.

II. *Conference of County Medical Society Officers.*

The Secretary's Conference, a yearly meeting of the officers of the County Medical Societies, was revived this year with the program being presented by this Commission in cooperation with the Commission on Legislation. Panel discussions covering public information, communications and organizational affairs were discussed by Dr. Maurice Glock, President of Indiana State Medical Association, Dr. Kenneth Neumann, Chairman of the Indiana State Medical Association Council, Dr. Wendell Covalt, Chairman of the Indiana State Medical Association Executive Committee along with two members of the Public Relations Commission, Dr. William G. Bannon and Dr. Harry G. Becker.

Dr. Ernest B. Howard, Assistant to the Executive Vice-President of the American Medical Association was the featured speaker and he discussed the legislative problems of medicine which are to appear before the 88th session of Congress.

The afternoon panel dealt with congressional and state legislative issues of special importance to the medical profession in 1963. This panel was made up of Dr. Joseph Black, Chairman of the Commission on Legislation, Dr. Otis Bowen, Chairman of the Health Committee, House of Representatives of Indiana, Dr. James Kirtley, State Senator from Montgomery-Putnam counties, Dr. Eugene Senseny, Vice-Chairman of the Legislative Commission and Dr. Donald E. Wood, President-elect of Indiana State Medical Association. There was enthusiastic response to this program and we are planning a similar conference of County Medical Society Officers in 1964.

III. *State Fair Exhibits.*

The Commission with the assistance of the AMA Bureau of Exhibits is presenting the "Transparent Woman" exhibit this September. Members of the Womans Auxiliary of the Marion County Medical Society will serve as attendants to these exhibits

and medical students will be available to record blood pressure readings of visitors who wish such.

IV. *Operation Hometown.*

The Commission has asked each individual physician to become acquainted with "Operation Hometown" which is the profession's modernized campaign of public education against enactment of HR 3920, the current proposal for medical care for the aged under social security now before the 88th Congress.

V. *Medic Alert Program.*

The purpose of this program is to provide a mechanism whereby persons afflicted with a certain illness carry identification tags or bracelets advising the nature of the ailment for use in emergency situations. It was the consensus of the Commission that the type of information to be carried on such identification tags be a matter to be determined by the individual physician and the patient.

VI. *Future Doctors.*

Because of the shortage of physicians and the decreased number of students seeking medicine as a career, we are asking each county medical society to work with promising junior and senior high school students in an effort to interest them in medicine or allied professions. Marion County, Madison County and St. Joseph County are but three of many societies which have initiated a program to attract outstanding high school students to a career in medicine.

VII. *Science Fair.*

Continued participation in Science Fair activities including the defraying of expenses of local representatives to the National Science Fair is most desirable.

VIII. *Medical Assistant's Program.*

Indiana University, through its extension centers, is conducting a training program for medical assistants. The program consists of a non-credit college level course consisting of six subjects and is given one night weekly. The Commission is furthering this program by giving it adequate publicity and support.

WILLIAM G. BANNON, M.D., *Chairman*
HARRY G. BECKER, M.D., *Vice-Chairman*
GLEN McCLURE, M.D., *Secretary*
R. L. KLEINDORFER, M.D.
B. E. SUGARMAN, M.D.
HARRY R. BAXTER, M.D.
WILLIAM R. TINDALL, M.D.
HOWARD FAUST, M.D.
JAMES M. KIRTLEY, M.D.
THOMAS C. CHAEL, M.D.
R. M. HUMMEL, M.D.
FREDERIC L. SCHOEN, M.D.
RICHARD W. HOLDEMAN, M.D.
T. D. ARMSTRONG, M.D.
OTTIS N. OLVEY, M.D.

Governmental Medical Services

The Commission on Governmental Medical Services met immediately following the annual meeting for organization and discussion. They have held three meetings during the past year with an average of 70% attendance.

The commission has been active in many fields. This activity shall be presented according to division of sub-committees.

1. *Civil Defense*

To keep up with newer developments of Civil Defense Medical Services, members of this committee yearly attend the Civil Defense meeting in Chicago for county medical services directors. Also the Civil Defense meeting in connection with the recent American Medical Association was attended. One member completed the Public Health and Medical-Chemical Biological and Radiological Defense course given at Fort McClellan, Alabama.

The fourth annual Civil Defense and Medical Preparedness Seminar sponsored by this committee was given this spring. This program again emphasized the necessity of fallout shelters in saving lives in case of a nuclear attack. Another paper was on the Medical Self Help Program and the importance in training people to help themselves medically during and after an attack. The possibility of use of biological and gas in an all out attack was discussed in another paper. There is more and more evidence that the secret weapon of the enemy may not be the 100-megaton bomb but gas and germs. In this connection we urge that more gas masks and suitable filters be made available for purchase by the general public.

The last paper was on the role of the American Medical Association in disaster preparedness. Next year's Civil Defense meeting may be an all day affair in cooperation with the United States Public Health Service.

The committee wishes to thank the State Civil Defense Department, the Marion County Civil Defense Department, and the Indiana State Board of Health for cooperation in putting on this program.

2. *Mental Health*

The Joint Steering Committee, originally created to select and lead the Indiana delegation to the AMA's first Congress on Mental Health held in October, 1962, with the approval of the Council of the Indiana State Medical Association, has continued to function by having monthly meetings at the Indiana State Medical Association Headquarters in Indianapolis to provide leadership for the state in attempting to implement the principles on mental health as enunciated by the AMA.

This implementation has taken the form of holding an Indiana Congress on Mental Health at the Claypool Hotel in Indianapolis on February 20, 1963. Dr. Edward Annis, President, American Medical Association, was the keynote speaker. Governor Matthew Welsh spoke to the assembly at the luncheon. The program was put on by the Joint Steering Committee; Dr. Harry Pandolfo, member of the Board of Community Service Council of Metropolitan Indianapolis; Dr. Paul E. Burns, Legislative Chairman of the Indiana Asso-

ciation for Mental Health and Dr. Perry Talkington, member of the American Psychiatric Association Commission on Insurance of Dallas, Texas. Dr. Maurice Glock, President of the Indiana State Medical Association, aided in hosting the meeting.

The purpose of this State Congress on Mental Health was the same as the AMA's Congress on Mental Health held at Chicago in October, 1962, namely to point out:

1. Since one of every two hospital beds in the United States is occupied by a mentally ill patient, then mental illness and health is medicine's "number one" health problem.

2. That this picture can be changed by early and intensive treatment and the use of modern drugs.

3. This should be the concern of every physician and they must take an active part in seeing to it that mental health activities at the local, state and federal levels are coordinated and reasonable according to sound medical principles.

The state meeting was attended by 110 physicians and their wives from 42 counties and almost an equal number of lay workers from local chapters of the Mental Health Association. Prior to this meeting it was found that activities of the committee were seriously and disproportionately depleting the allocation of funds of the parent Commission on Governmental Medical Services, so it was resolved to create a fund of $1,500.00 by a contribution of $500.00 each from the Indiana State Medical Association, the Indiana Mental Health Association, and jointly by the Northern and Indiana Branches of the American Psychiatric Association to conduct this State Mental Health Congress, other similar regional meetings and other operating expenses of the committee. These funds are paid into and handled by the Indiana State Medical Association Headquarters and the Indiana State Medical Association allotment ($500.00) was approved and appropriated by the Indiana State Medical Association Council and the Budget Committee.

Through the good offices of Dr. Earl Mericle, a sponsor for the State Congress on Mental Health and a free meal to those attending was found. We are much indebted and most appreciative to Mr. Edward F. Gallahue, president of the American States Insurance Company, for this contribution. Mr. Gallahue has long been active in sponsoring advancements in the mental health field.

We are also indebted to Mr. James L. Keyes of the Cummins Manufacturing Company, a member of the Joint Steering Committee from the Mental Health group and president of the Indiana Association for Retarded Children for his printing and furnishing "A Statement about Mental Health and Mental Retardation by Indiana State Medical Association."

Regional meetings are being planned to be held in October and November, 1963, so that we may reach still more of the medical profession in Indiana to acquaint them with the principles on mental health as enunciated by the American Medical Association and to encourage our doctors at the county society level to assume an active part in coordinating and determining the direction of this program.

In March, 1963, the AMA called a meeting of the State Mental Health Committee Chairmen and Executive Secretaries and Presidents of State Medical Associations as a follow up to the October, 1962, Congress on Mental Health. This meeting was to stimulate states to have their own Congress on Mental Health as had been recommended by the AMA. Indiana was honored by having Dr. Stewart T. Ginsberg, Indiana Commissioner of Mental Health on the program to report on our State Congress on Mental Health which was the first one so held by a state. We were highly commended.

At our May 19, 1963 meeting, Dr. Ginsberg and his assistant, Mr. Myers, presented a plan to create a State Commission on Planning for Mental Health in Indiana. This commission will be composed of representatives of some 50 organizations having reason to be interested in mental health. There will be additional task forces to make surveys and their reports will be used by the commission in writing a state mental health plan in depth encompassing such matters as the establishment of local or regional full time mental health centers, future plans for decentralization of state mental hospitals and rapid treatment centers, etc.

The Joint Steering Committee has approved this plan for planning in principle and has agreed to accept an appointment by the Governor as an Advisory Committee to the Commission.

This does not exactly place us in a position of leadership in the program, however; it might be too costly in terms of Association money and time of personnel involved to try to assume full leadership. On the other hand, functioning as an Advisory Committee to the commission, we will be in a position to influence and guide the format of the final plans.

3. *Medicare*

The contract for the Indiana State Medical Association acting as a fiscal administrator of the Medicare program was renewed by the Association and this commission was charged with the responsibility of operating this program.

During the contract period, beginning April 1, 1962 and terminating March 31, 1963, a total of 6,440 claims were paid, totalling $507,328.65.

The Review Committee has had a lot of work to do in reviewing many physicians' claims for services rendered Medicare patients. Those physicians in areas where there is a constant load of military dependents are filing their claims in such a way as to make it easy for processing these as rapidly as possible; however, the physician receiving an occasional patient under this program continues to experience difficulty in filing his claims, which has

necessitated the committee requesting additional information and returning the claim to the physician for filling it out in proper order.

While there have been a few cases where Doctors have been dissatisfied with the amounts allowed by the committee, we believe, in the main, the program is working very successfully.

The auditors from the Government have completed the audit of the past year and found no discrepancies in the operations of the Association in handling this program.

4. *Crippled Children and Rehabilitation*

There has been no activity referred to this subcommittee; however, a communication was received from Dr. Carl D. Martz.

5. *Liaison with Department of Welfare*

The commission wishes to congratulate the Commission on Legislation for their activity on the Kerr-Mills Bill and it is hoped that this may be instituted by the time of the annual meeting, even though it was vetoed by the Governor and it is not the wish of the director of the State Department of Public Welfare. If this should not come about we hope that further activity will be forthcoming in the next Legislature.

A survey was conducted concerning the various plans in operation in the state of Indiana having to do with the schedules between physicians and county departments of welfare and it was found that three county societies reported using Blue Shield Preferred; 29 use Blue Shield Standard; four the Intermediate and ten have other schedules.

It is strongly recommended that a liaison committee be appointed in each county to coordinate the activities between the physicians and the Department of Public Welfare.

6. *Veterans Medical Care*

The sub-committee on Veterans Medical Care has met several times and it was felt by this committee and the commission as a whole that the fee schedule for home town medical care needed reevaluation. It is felt that in all dealings with the Government, be it Medicare or Veterans' Care, that realistic payments should prevail. We are at the present time operating without a signed contract and under the previous schedule. However, a meeting has been held with representatives of the Veterans Administration and a new proposal made which would bring the veterans care program up to the level of other government contracts under which physicians are operating.

7. *Liaison with Veterans' Affairs*

Quarterly meetings have been held by this committee consisting of representatives of the Indiana State Medical Association, Indiana State Hospital Association, Indiana Department of American Legion, Indiana State Dental Association, and representatives of a new group, the Indiana Pharmaceutical Association. There has been much discussion and the American Legion very fortunately warned us of possible dangers in the Department of Health, Education and Welfare. A new Chief Medical Director of the Veterans' Administration has been appointed, Major General Joseph H. McNinch. We were very happy to see this was a physician rather than a lay individual, as had been feared for a time.

The Indiana State Medical Association's turn to host this meeting will be on September 25, 1963, at which time General McNinch will be a guest of the Association for a discussion of the veterans' programs.

At the time of the writing of this report, we envision that this will be a large meeting encompassing not only the groups that normally get together but all V.A. Hospital directors from the surrounding states, as well as Indiana, and other veteran personnel.

It is recommended that the Indiana State Medical Association continue activity on this liaison group.

CHARLES R. ALVEY, M.D., *Chairman*
WILLIAM J. CRON, M.D., *Vice-Chairman*
HERMAN ECHSNER, M.D., *Secretary*
GEORGE WILLISON, M.D.
CHARLES HENDRIX, M.D.
GENE S. PIERCE, M.D.
V. EARLE WISEMAN, M.D.
GLEN WARD LEE, M.D.
ARVINE POPPLEWELL, M.D.
RAMON B. DUBOIS, M.D.
EDWARD J. DIEROLF, M.D.
ERNEST C. MURRAY, M.D.
GEORGE D. BUCKNER, M.D.
JEAN V. CARTER, M.D.

Public Health

During the past year the Commission on Public Health has had active participation by most of its members in order to carry on a very busy schedule of reference work to the Commission. The Committee structure has continued with little or no significant change, but because of the broad scope of activity requested from the Commission on Public Health, several doctors not officially on the Commission have been asked to serve as ex-officio members. These members have aided greatly in their special fields of interest.

Standing Committees have been maintained as follows:

Committee on Industrial Medical Practices and Programs

Lowell W. Painter, M.D., *Chairman*
Jacob Fleischer, M.D.
H. Glenn Gardiner, M.D.
John P. Turner, M.D.
James Taylor, M.D., *ex-officio*
William Baughn, M.D., *ex-officio*
Daniel Gard, M.D., *ex-officio*
E. S. Jones, M.D., *ex-officio*

Committee on Traffic Safety

Howard T. Hammel, M.D., *Chairman*
John Davis, M.D.
Jacob Fleischer, M.D.

Committee on Rural Health and Physician Placement

Eugene S. Rifner, M.D., *Chairman*
Forrest J. Babb, M.D.
John B. Hickam, M.D.
R. M. Seibel, M.D.
T. O. Middleton, M.D.
John Davis, M.D.

Committee for Preventive Medicine and Liaison with the State Board of Health

Gerald F. Kempf, M.D., *Chairman*
Arnold W. Brockmole, M.D.
Berniece M. Williams, M.D.
T. O. Middleton, M.D.
John P. Turner, M.D.
Andrew C. Offutt, M.D., *ex-officio*
Louis Spolyar, M.D., *ex-officio*

This year, however, it has seemed feasible to combine the problems of vision and hearing with the Committee of Industrial Medical Practices and Programs. An attempt has been made to do much of the work by correspondence, keeping the formal meetings of the Commission to a minimum.

Committee Reports:

Committee on Rural Health and Physician Placement

This Committee continued to function through the State Office on Physician Placement. The problems of more areas for the doctors to locate than there are doctors to locate in them continues to be quite prevalent. This Committee has felt the tremendous need for physicians in rural areas.

In this respect the Junior-Senior Day was held in March again of this year. The program outlined practice in the rural areas. With this program we discussed location, insurance and problems of the rural practitioner. At no time was it painted as the most rosy place in which to practice, but at the same time an attempt was made to make it appear as attractive as is it. Nearly half of the Juniors and Seniors of Indiana University Medical School and their wives attended this all day meeting. We have received several compliments concerning the program and feel that this was a necessary effort by the state organization and should be expanded. It is felt by the Committee that this particular program augmented by visits to the Medical School by the Chairman in the past year has certainly led to a few students seeing the light of General Practice and Rural Practice especially. It is sincerely hoped by the Committee that this type of program meets with the approval of the Indiana State Medical Association.

The Committee has also maintained liaison with Rural Health Organizations, especially that of the American Medical Association's Rural Health Council.

The Committee suggests the continuation of this general program.

The Committee further states that with communities seeking doctors and doctors seeking communities, the result has been that 25 doctors have been placed. This has been recognized and supported by the public press. (Example, *Indianapolis Star*, Magazine Section, July 14, 1963.)

Committee for Preventive Medicine and Liaison with the State Board of Health

During the past year many specific questions have been referred to this Committee, and some of these are still under consideration.

One of the pertinent questions about which there seemed to be misunderstanding was that of eye testing in the schools and an interpretation of the legal rights and responsibilities of all parties concerned. Considerable discussion has been given this, and it seems that under the direction of Dr. Offutt, Director of the Indiana State Board of Health, there has been a clarification in that it simply means that the parents of a child wearing corrective lenses should be informed of the results of any eye testing, and the initiative and responsibility for referring the child for further corrective examination and/or treatment must be up to those parents.

The Chairman has continued to serve on the Committee for the Eradication of Tuberculosis as a representative of the Committee and of the Commission on Public Health of the Indiana State Medical Association. The Chairman is also presently on a medical committee for review of the medical aspects of this plan.

Also considerable investigation was made as to the oral poliomyelitis vaccine, and since the Public Health Service and the Federal Drug Administration have apparently licensed this as was previously stated, the further activity in this area should come from the local physician working with his local society rather than from the Public Health Commission. It is recommended that this Committee should continue to give sustained attention to the contagious disease problems, the activities and recommendations from the voluntary health agencies, and the governmental health agencies. We are greatly indebted to the Indiana State Board of Health for assistance and cooperation with this Committee.

Committee on Industrial Medical Practices and Programs

During the past year the Committee has met at the time of the Commission meetings and also some additional meetings, emphasis being placed upon trying to evaluate industrial medical practices in their various areas, and also giving special attention to physicians directly or indirectly in industrial medical practice. It seems to us that the lack of understanding of the relationship between the physicians is one of the pertinent problems in this

area. Prompt, clear and definite communication between physicians is also greatly needed.

The Committee, because of this, has undertaken further investigation of this situation, and has sent a brief questionnaire to a selected group of practicing physicians in the representative fields, attempting to gain further information along this line.

Very few specific questions regarding industrial medical practices or programs have been directed to this Committee, and it seems that those have been satisfactorily resolved. Efforts are being made to further coordinate the work of conservation of hearing and vision with the aid of some of our consultants.

This Committee recommends that the above activities should be continued in the coming year.

Committee on Traffic Safety

During the past year the Committee on Traffic Safety has continued to keep alert regarding the problems of traffic safety, conferring especially with the Indiana State Police, Highway Department and the Indiana Traffic Safety Foundation. It seems that in every county of the State we are challenged by a constant rise in traffic accidents with an appalling number of deaths.

Your Committee again recommends that the Indiana State Medical Association should support the Indiana Traffic Safety Foundation.

After due consideration of the problems of doing tonometry, the commission recommends that none other than physicians suitably trained in this technic by an ophthalmologist should do tonometry.

In Conclusion

The membership of the Commission on Public Health seems to be in agreement that the present practices should be continued and expanded in some areas. At present the same committee structure is recommended. We have had a representative from the Student American Medical Association at some of our meetings, and we would encourage a continuance of this practice, possibly expanding it as seemed feasible.

EMMETT B. LAMB, M.D., *Chairman*

Voluntary Health Agencies

Membership on The Commission on Voluntary Health Agencies (1962-1963) was as follows:

(1st Distr.) Virgil McCarty, 113 South Main St., Princeton

(2nd Distr.) Herbert O. Chattin, 729 Main St., Vincennes

(3rd Distr.) Kenneth H. Brown, 410 East Spring St., New Albany

(4th Distr.) Robert Acher, 221 East Washington St., Greensburg

(5th Distr.) Dick Steele, Alamo Building, Greencastle

(6th Distr.) Lucian A. Arata, 327 West Broadway, Shelbyville

(7th Distr.) Norman R. Booher, 447 East 38th St., Indianapolis

(8th Distr.) A. H. Ridgway, Lapel

(9th Distr.) John C. Carney, 116 North Illinois St., Monticello

(10th Distr.) Walfred A. Nelson, 559 South Lake St., Gary

(11th Distr.) Wendell W. Ayres, 550 Wabash Ave., Marion

(12th Distr.) Franklin A. Bryan, 512 Medical Center Bldg., Fort Wayne

(13th Distr.) Robert A. Fargher, 811 Jefferson Ave., LaPorte

(At Large) James H. Gosman, 2901 North Meridian St., Indianapolis

(At Large) Wendell A. Shullenberger, 1815 North Capitol Ave., Indianapolis

It is with regret that we must report to this House that Doctor John C. Carney died November 26, 1962. The President appointed Doctor Donald L. McKinney, of Otterbein to complete Doctor Carney's term of office on this Commission.

The Commission held three regular meetings October 28, January 20 and April 21, and there is a possibility that a fourth meeting will be held prior to the annual meeting, which is not set at the date of the writing of this report.

At the October 28 meeting the Commission was organized and the following officers were elected: Norman Booher, M.D., re-elected Chairman, Wendell Ayres, M.D., Vice-Chairman and James Gosman, M.D., Secretary.

The budget requested for the operation of this Commission was nine hundred dollars ($900.00) and the budget allocated was later approved at seven hundred and fifty dollars ($750.00).

As in the past, the Commission was organized to work by the liaison system with the various voluntary health agencies signifying their desire for cooperation.

The following members of the Commission were given assignments to the voluntary health agencies after their names:

Herbert O. Chattin, M.D., and Robert Acher, M.D.—Tuberculosis

Wendell A. Shullenberger, M.D., and Lucian A. Arata, M.D.—National Foundation

Franklin Bryan, M.D., and Wendell A. Shullenberger, M.D.—Heart

Robert Acher, M.D., and Norman R. Booher, M.D.—Mental Health

Wendell Ayres, M.D.—Muscular Dystrophy

Kenneth H. Brown, M.D.—Diabetes

Walfred A. Nelson, M.D., and James Gosman, M.D.—Cancer

Robert Acher, M.D., and Virgil McCarty, M.D.—Indiana Health Foundation

Dick Steele, M.D., and Virgil McCarty, M.D.—Crippled Children

Dick Steele, M.D., and Kenneth H. Brown, M.D.—Cystic Fibrosis

A. H. Ridgway, M.D.—Multiple Sclerosis

Franklin Bryan, M.D., and Wendell Ayres, M.D.—Cerebral Palsy

Walfred A. Nelson, M.D.—Ind. Council for the Blind

Robert A. Fargher, M.D., and Alton H. Ridgway, M.D.—Arthritis

Franklin Bryan, M.D.—Social Health Association

Herbert O. Chattin, M.D.—Aiding Leukemia Stricken American Children

Dick Steele, M.D.—Indiana Assoc. for Retarded Children, Inc.

Walfred A. Nelson, M.D.—City of Hope

During the year the Commission has become involved in the Joint Committee on Mental Health and this has added greatly to the work the Commission has been required to do. This involvement was because mental health programs deal with many of the voluntary health agencies. The report of this Committee will be given to the House of Delegates by the Chairman of this special Committee.

At the January 20 meeting, the Commission had as its guest, Doctor William S. Clark, Director of the Medical Department of the National Foundation of New York. The problems with which this Commission has been confronted in connection with the National Foundation are collecting funds for use other than that which is understood by the general public and the wide duplication of efforts on the part of the National Foundation and other reputable voluntary health agencies. These matters were discussed further. All of the objections of the Indiana State Medical Association to the operation of the National Foundation, as explained in Resolution No. 26 (AMA), December, 1962, were presented to Dr. Clark. Dr. Clark went into the philosophy of the National Foundation, as he understood it, and explained the programs of the National Foundation, especially that of research, fully to the Commission.

In response to the question, "Dr. Clark, is it your concept that the National Foundation is really going to develop into the N.I.H. of private enterprise"—Dr. Clark said, "yes, this was a good way to express it" and he said "that they feel that the researcher must not become a captive of the Federal Government."

Dr. Clark also expressed the idea that the biggest competitors to the N.I.H. were the larger voluntary health agencies and it was his opinion that many of the smaller voluntary health agencies will have to give up.

In regard to the attitude of the National Foundation towards United Fund, Dr. Clark stated that Mr. O'Connor, President of the National Foundation is opposed to United Fund giving; therefore, National Foundation is opposed to the United Fund method of raising money.

Dr. Clark also stated that efforts have been made to amalgamate with the Arthritis Foundation without success.

At the January 20 meeting, a letter was presented from the Indiana Division of the American Cancer Society, asking that this Commission sponsor better understanding of the "accounting and financial reporting procedures for voluntary health agencies" as worked out and published by the National Health Council.

It was agreed that the Indiana State Medical Association would sponsor a speaker from the National Health Council to report on the progress of this project to the voluntary health agencies of Indiana. This meeting was held in the Severin Hotel in Indianapolis on May 21 and Mr. William Freitag was sent by the National Health Council to present the progress of this effort to all the representatives of the voluntary health agencies that could be present on this occasion.

One of the big problems with which the Commission is struggling is to get the establishment in the voluntary health agencies of some uniform method of accounting that would allow all agencies' operations to be compared with one another on a fair basis. The trend seems to be very evident that the larger voluntary health agencies are proceeding to adopt this uniform code in good faith. It would also appear that this trend is also being followed by the satellite agencies of these national groups in Indiana.

As a result of the approval of the House of Delegates at the December meeting of the American Medical Association, Resolution No. 26, submitted by the Indiana Delegates to the AMA was considered by the Committee on Voluntary Health Agencies (Shipman Committee) of the AMA. At the first meeting of this Committee, it was evident that the true work being undertaken in Indiana in this field was not understood by this Committee. (The Executive Secretary of the Indiana State Medical Association, Mr. James Waggener, attended this meeting.) As a result, a second meeting was called in Washington, D. C., in March, 1963, to which the Chairman of the Commission was invited, and, incidentally, not only attended this meeting but attended a part of the National Health Forum on this occasion. At this time Resolution No. 26 was thoroughly discussed but the action of this Committee in its report to the Board of Trustees has not been published at the time this report is written—in order that this question receive definitive action by the House of Delegates of the AMA, Resolution No. 26 has been revised, as recommended, by this Commission and approved by the Council and will be resubmitted at the June meeting of the AMA in Atlantic City.

This is an effort to get a definite policy made on the National Foundation, which varies so widely in its operation from other voluntary health agencies as to make it unacceptable under the Criteria under which this Commission operates.

At all of the meetings of the Commission the questionnaires voluntarily submitted by the voluntary health agencies of this State have been discussed and weighed as to whether or not each individual organization fulfills the Criteria set forth by this Commission and published in last year's annual report.

A great deal of time and debate has been spent

on every one of these organizations and in several instances, interested persons have been invited to present their point of view for particular organizations before the Commission. It has been noted that many of the organizations have improved their operations in order to make an obvious stride to meet the requirements set in the Criteria which is used by the Indiana State Medical Association to approve, or disapprove; some have not made this effort.

As a result of the deliberations of the Commission the following eighteen organizations have been approved fully by the ISMA's Commission as meeting the Criteria:

1. The Indiana Society for Crippled Children and Adults, Inc.
2. The Indianapolis Diabetes Association
3. Marion County Cancer Society, Inc.
4. The Evansville Epilepsy League, Inc.
5. The Arthritis and Rheumatism Foundation
6. Indiana Association for Retarded Children, Inc.
7. Social Health Association of Indianapolis and Marion County
8. United Cerebral Palsy of Indiana, Inc.
9. The American Cancer Society, Indiana Division
10. Indiana Association for Mental Health
11. Indiana Tuberculosis Association
12. Indiana Heart Association, Inc.
13. Myasthenia Gravis Foundation, Inc. (Indiana State Chapter)
14. Cancer Society of St. Joseph County
15. National Multiple Sclerosis Society (Indiana Chapter)
16. Indiana Society for Prevention of Blindness
17. Marion County Muscular Dystrophy Foundation, Inc.
18. Allen County Cancer Society

The following four voluntary health agencies have been disapproved by the Commission:

1. The National Foundation
2. Community Cancer Unit of Grant County
3. Fayette County Cancer Fund
4. United Health Foundation of Elkhart County, Inc.

For various reasons three organizations are still under consideration—one organization is a local committee organization and two national organizations of vague purposes.

There are several other voluntary health organizations operating in the State of Indiana who have not yet seen fit to ask for the approval of this Commission.

Detailed data of every one of these agencies is on file at the Headquarters Office of the Indiana State Medical Association.

The only list of organizations that has been published are those who have been approved. For legal reasons, it was felt best to not publish those disapproved, but any member of the ISMA wishing to make telephone inquiry about them can receive full information at the headquarters office.

In the deliberations of this Commission over the year, one problem is becoming more acute as time goes on and that is that the argument between the philosophy of individual fund raising campaigns vs. United Fund campaigns has become obvious.

We have not differentiated between organizations, as to the methods by which their funds are raised.

The Commission foresees the possibility that we might well be involved in establishing policy in this matter in the future.

After the bulk of this annual report was dictated, certain far reaching events occurred. As a result of the meeting of the representatives of the Indiana State Medical Association with the Committee on Voluntary Health Agencies (Shipman Committee) of the AMA, certain recommendations on policy matters in regard to relationships of voluntary health agencies and the AMA have arisen. As a result of the presentation made by representatives of the ISMA before the Board of Trustees of the AMA at the Atlantic City Meeting in June, 1963, the report submitted by the Shipman Committee to the Board of Trustees was taken under advisement but considered only as a progress report from that Committee to the Board and was not submitted to the House of Delegates at the annual meeting of the AMA. As a consequence of the presentation of the Indiana State Medical Association, a special meeting of representatives of all of the fifty states is being called in Chicago at the headquarters of the AMA late in August, 1963, at which time the problems involved in the establishment of policy in regards to the voluntary health agencies on the national level will be discussed. The Commission expects to be represented at this meeting and the entire program of the ISMA in regards to voluntary health agencies will be laid before this special meeting. There will be no determination of AMA policy prior to December, 1963 at the meeting of the House of Delegates of the AMA. If the policy finally determined by the AMA permits it this Commission looks forward to another year of work along the same lines as reported in this annual report above. It is very possible that the new policy being accepted in the AMA may alter the scope and activities of this Commission in the future. It is felt that the Delegates of this Association would definitely want the work of this Commission to be in harmony with the national policy.

In writing this report, the Chairman of this Commission wants to emphasize to the members of the House of Delegates that the members of this Commission have spent hundreds of hours on the work of this Commission and all the members of this Commission who have been active have found that the work of the Commission becomes heavier with each meeting.

We also would like the delegates to know that the headquarters staff, particularly Miss Eleanor

Chapple, Mr. Joe Palmer, Mr. Howard Grindstaff and Mr. James Waggener, have spent a great deal of time and effort in the affairs of this Commission and have done a superb job in supporting us.

As Chairman of the Commission, I would like to express my appreciation to the above personnel of the Headquarters Office and to each member of the Commission for the diligent work and interest shown by everyone.

NORMAN R. BOOHER, M.D., *Chairman*

Medical Economics and Insurance

The Commission met on October 10, 1962, February 3, 1963, March 17, 1963, and May 19, 1963. Instead of assigning work to subcommittees as in the past, each member was given a subject to study in depth on a continuing basis so that he might keep others on the Commission informed. Dr. Taylor made an analysis of the Trussell Report on New York Blue Shield; Dr. Leffel was the expert on Keogh Benefits; Dr. Hannah, Utilization Committees; Dr. Barnhart, Foundation Plans; Dr. Bills, United Steel Workers Relationships; Dr. Langohr, Insurance Reports and Group Practice; Dr. Garner, Health Plans for the Aged and the Curtis Bill; Dr. Scharbrough, Psychiatry and Drug Benefits; Dr. Goodman, Blue Shield; Dr. Wagner, "Scope of Benefits" and "Quality of Medical Care," two speeches from Third Annual Conference on Insurance, AMA; Dr. Edwards, Nursing Home Care and Dr. Beeler, Transfer of Radiology and Pathology.

At the February 3, 1963 meeting, in response to a request from the Executive Committee, Indiana State Medical Association, the following policy was formulated concerning additional charges by attending physician for the completion of insurance forms:

"The Commission recommends that any policy regarding additional charges by the attending physician should be determined at the local level by each County Medical Society.

If the Health Insurance Council Simplified Forms are used, as previously endorsed by the Commission and Indiana State Medical Association House of Delegates, it is recommended that no charge be made for completing one such form. This would also apply to Blue Shield forms and compensation insurance forms.

If the patient has more than one insurance carrier resulting in multiple insurance forms to be completed, the Commission recognizes considerable variation exists among physicians in their facilities for rendering such service for their patients. Many practitioners with high fixed office overhead and low patient fees may find it economically necessary to place a reasonable clerical charge for performing this service; the alternative would be to raise professional fees to cover the expense which would possibly work hardships on self-pay patients. This is a matter for local or individual determination."

Upon advice of Dr. Leffel, the Commission did not believe a Retirement Fund administered by the Indiana State Medical Association should be recommended this year since specific rulings by Internal Revenue Service have not been made.

Dr. Leffel moved that Blue Cross be requested to provide additional room and board allowance for the elderly in metropolitan areas by suitable means, e.g., a rider on the non-group over-sixty-five policies. This was approved by the Commission. Mr. Guy Spring, Executive Director of Blue Cross, replied in a letter of April 22, 1963, that this proposal was under study.

The Commission was informed by Health Insurance Council Area Representative that some Indiana County Societies were using a special claim form which did not provide sufficient information. The Commission re-affirmed its 1959 recommendation that the "Simplified Claim Forms" of H. I. C. be the standard claim form for private health insurance.

Dr. Garner's report follows:

The Blue Cross and Blue Shield of Indiana provide a good, rather reasonable, insurance program for individuals over 65 years of age, and even though all the hospitalization and physicians' fees are not covered completely by the program available to them, it does seem adequate at this time.

Of interest was a program that has been developed in Connecticut and in New York, promulgated by the Commercial Insurance Companies in that area. It is an insurance program for individuals over 65 years of age which provides very similar coverage, at a similar cost, to that provided by Indiana Blue Cross and Blue Shield.

A program similar to the Connecticut and New York plan could be established in Indiana by the Commercial Companies, providing the Connecticut and New York plan seems to be acceptable to the individuals in those respective states, after a period of study. However, any program of this nature would have to be investigated by the private insurance companies of Indiana themselves, and I do not believe at this time that it is the Indiana State Medical Association's field to make any recommendation to the private insurance companies.

Dr. Beeler requests that consideration be given by the appropriate Commission to the development of an "Impartial Medical Witness Program" which he believes would be most helpful to Compensation Insurance adjudication.

We have received the following Committee Report from Dr. Clifford C. Taylor:

(For report of Commission on Medical Economics and Insurance)

A study was made of a survey by the Columbia University School of Public Health in regard to families of 300 teamsters who received hospitalization from July 1st through December of 1959. These had Blue Shield insurance. This report revealed that the patients felt that they had received

the "best of modern medicine." Some outstanding medical conclusions, however, were that:

(1) Only three-fourths received optimum medical care
(2) One-fifth of the hospital admissions were unnecessary
(3) One-third of the hysterectomies were unnecessary
(4) In hospitals with no approved training program and no national accreditation over two-fifths received poor care.

The recommendation made was that welfare funds provide facilities which do not allow the workers a free choice of doctors as the Blue Shield insurance does.

The alarming realization is how this report has been dispensed to the public. Newspaper articles in the East and Midwest have stated that very poor care is being received by the workers covered by Blue Shield.

Three resolutions are submitted by the Commission which are titled: (1) Improving Patient Care; (2) Dental Benefits and Representation Offered by Blue Shield, and (3) County Society Review Committees for Blue Cross. These resolutions pertain to areas which will be of increasing concern in Voluntary Health Insurance.

Blue Cross-Blue Shield Labor Advisory Committee Meeting—At the request of President Glock, the Commission Chairman participated in a panel discussion on health care costs at the April 24, 1963 meeting of the Blue Cross-Blue Shield Labor Advisory Committee. Two impressions are worth reporting. First, Organized Labor definitely considers Blue Shield as being an official, economic arm of Organized Medicine. There seems to be a distinction in this respect from their attitude about Blue Cross which they feel is more public oriented. It, therefore, behooves those physician board members of Blue Shield to maintain close liaison with Indiana State Medical Association. Second, the difference in primary concerns between local labor leaders and those at the State and National level and particularly National Union staff personnel. Perhaps there is a possibility of home town physicians influencing local union members to select insurance benefits which do not distort traditional patterns of medical care.

Ad Hoc Committee for Transfer of X-Ray and Pathology Benefits from Blue Cross to Blue Shield. This Committee was appointed by President Glock and consists of G. W. Willison, M.D., internist from Evansville and Blue Shield Vice-President; L. I. Thomas, M.D., orthopedist from Indianapolis and Chairman of this Commission in 1961 and 1962; C. P. Van Meter, M.D., G.P. from Indianapolis and former Marion County Society President; R. J. Bills, M.D., general surgeon from Gary and member of the Commission on Medical Economics and Insurance and Chairman of the "Joint Cost Committee" and E. T. Edwards, M.D., G.P. from Vincennes, who was named Chairman.

The Ad Hoc Committee met March 10, 1963, with the Executive Committee of Indiana Hospital Association consisting of Jack A. L. Hahn, Methodist Hospital, Indianapolis, and President of I. H. A.; Sister Mary, President-Elect of Anderson; A. S. Malasto, Vice President of I. H. A. from Valparaiso and Elton TeKolste, Executive Director of I. H. A.

Three main points for the transfer were advanced orally by the Ad Hoc members. These were (1) desire to have all professional services under Blue Shield, thereby removing the example of Blue Cross being a precedent for King-Anderson type legislation, (2) to better meet future growth requirements of Blue Shield in providing out of hospital benefits, and (3) to permit the most economical prepayment of professional services. The representatives of the Indiana Hospital Association requested documentation of these verbal statements to them and a "white paper" was prepared after consultation with representatives of the Radiology and Pathology State Associations on April 27, 1963. This paper was then approved by the Indiana State Medical Association Executive Committee and submitted by mail to each Indiana Hospital Administrator, Medical Staff President and County Medical Society President for their information and action. Mailing to each hospital was in accordance with instructions by the 1962 House of Delegates that copies of the Resolution No. 12 (page 1886, *JISMA* December 1962) as amended. The white paper was sent in the belief that it offered more explanation than the Resolution. A post card was inclosed inviting comment from the administrator. This action met with hostility from Indiana Hospital Association.

The request of the doctors to the hospitals is very simple. The hospitals need only change their billing for professional services from Blue Cross to Blue Shield; it then becomes a simple matter for Blue Cross and Blue Shield to complete the transfer.

Obviously, a supplemental report to the House of Delegates will be necessary, due to the need for submitting this report by mid-July.

Joint Cost Committee

Since the previous report to the House of Delegates, this Committee has met on September 26 and November 7, 1962, and on February 20, April 3, 1963, with a meeting scheduled for July 24, 1963.

Subjects discussed have been Nursing Education and Patient Costs, Hospital Formularies, Pricing Hospital Services, Utilization Committees, and methods of communication of facts pertaining to medical care costs to all concerned.

Indiana State Medical Association demonstrated its interest by presenting a method by which hospital medical staffs could study their own patterns of practice with their consequent influence on patient costs and voluntary health insurance premiums. This presentation was made under spon-

sorship of the Commission on Medical Economics and Insurance during the Third Annual Blue Shield Physicians' Advisory Council Seminar on April 21, 1963. We are grateful to Blue Shield providing this opportunity to speak to representatives of each Indiana Hospital Medical Staff.

Dr. R. James Bills, representing Indiana State Medical Association on the Joint Cost Committee became Chairman, July 24, 1963.

I wish to express my personal appreciation to the members of the Commission on Medical Economics and Insurance, to the members of the Ad Hoc Committee, and to the members of the Joint Cost Committee for their earnest efforts in this service for their professional colleagues and their patients.

EDWARD T. EDWARDS, M.D., *Chairman*
R. JAMES BILLS, M.D., *Vice-Chairman*
WILLARD T. BARNHART, M.D., *Secretary*
WILLIAM H. GARNER, JR., M.D.
WILLIAM SCHARBROUGH, M.D.
HUBERT T. GOODMAN, M.D.
MORRIS D. WERTENBERGER, M.D.
JAMES M. LEFFEL, M.D.
JOSEPH L. LARMORE, M.D.
RICHARD WAGNER, M.D.
JOHN LANGOHR, M.D.
JACK W. HANNAH, M.D.
CLIFFORD TAYLOR, M.D.
JOHN W. BEELER, M.D.

Resolution No. 1

Introduced by: COMMISSION ON MEDICAL ECONOMICS AND INSURANCE
Subject: IMPROVING PATIENT CARE

WHEREAS, The Indiana State Medical Association historically has been a leader in the improvement of patient care, and

WHEREAS, costs of medical care can not be properly judged without being related to the quality or effectiveness of patient care, and

WHEREAS, both subjects have been the object of special studies by various lay and professional agencies, and

WHEREAS, many separate efforts to improve patient care are being made, e.g., postgraduate physician programs, professional society meetings, Joint Commission on Accreditation of Hospitals, AMA-Nursing Home Association Accreditation Program, and

WHEREAS, Voluntary Health Insurance's expected growth will be in non-hospitalized medical services which places even more emphasis upon the capability of the physician, and

WHEREAS, the Indiana State Medical Association is the natural organization to provide needed leadership and coordination of the many separate efforts in Indiana;

NOW, THEREFORE BE IT RESOLVED, that the House of Delegates instruct the appropriate Commission to make a study of all efforts and factors having a direct bearing upon improving the continuing educational programs for physicians and other activities which augment patient care and recommend any necessary, constructive changes which it deems feasible.

Resolution No. 2

Introduced by: COMMISSION ON MEDICAL ECONOMICS AND INSURANCE
Subject: DENTAL BENEFITS AND REPRESENTATION OFFERED BY BLUE SHIELD

WHEREAS, Dental Services composed a significant portion of Indiana's Total Health Care Bill in 1962 being $56,000,000 as compared to $154,000,000 for Hospital Services and $143,000,000 for all Physicians' Services, and

WHEREAS, the American Dental Association and its various state components have shown interest in prepayment of dental services, and

WHEREAS, Blue Shield has the organization and operating experience which would be valuable to a dental plan, and

WHEREAS, a dental plan would contribute increased business volume, contributing to greater operating efficiency with resultant benefits to both medical and dental patient-members, and

WHEREAS, professional dental opinions would be necessary in the conduct of a Dental Benefit Plan, and

WHEREAS, it is desirable to have all professional services included in Blue Shield;

NOW, THEREFORE BE IT RESOLVED, That Indiana State Medical Association House of Delegates instruct those physicians who are Board Members of Blue Shield to act favorably on the inclusion of Dental Services under Blue Shield if the Indiana Dental Association should so desire;

BE IT FURTHER RESOLVED, that appropriate Indiana Dental Association representation upon the Blue Shield Board of Directors be approved, in the event that dental services benefits are offered by Blue Shield.

Resolution No. 3

Introduced by: COMMISSION ON MEDICAL ECONOMICS AND INSURANCE
Subject: RESOLUTION ENCOURAGING COUNTY MEDICAL SOCIETY'S INSURANCE COMMITTEE TO PERFORM REVIEW FUNCTION FOR INSURANCE PLANS

WHEREAS, there is an occasional need for a physician's analysis of insurance claims to determine if the clinical situation meets the contractural terms of the insurance coverage; and

WHEREAS, the present Blue Cross Physician's Advisory Committee is composed of five doctors representing the clinical fields of Pathology, Radiology, Psychiatry, General Surgery and General Practice; and

WHEREAS, specialization by physicians fre-

quently results in esoteric situations beyond the ken of the average physician; and

WHEREAS, County Medical Societies conduct local review committees for Blue Shield; and

WHEREAS, there exist local variances in medical facilities and patterns of clinical practice,

NOW, THEREFORE BE IT RESOLVED, That the Indiana State Medical Association House of Delegates encourage County Medical Societies to offer this service of clinical review of questioned claims to the insurance industry;

BE IT FURTHER RESOLVED, That the Industry then be advised that such service is available on an individual county basis.

Inter-Professional Relations

The Commission on Inter-Professional Relations has had a rather quiet year. With only two meetings, one to organize the Commission and the second meeting in December at which meeting several definite recommendations were made. Briefly recommending that the Executive Council of the Indiana State Medical Association support the attorney general's opinion that a restriction of prescription writing by podiatrists be continued and that the official opinions expressed in the letter of the attorney general be sent to the Indiana Pharmaceutical Association that they might be cognizant of them. Relationships with osteopaths were discussed and it was recommended that since they represent a local situation that they be handled locally as far as possible.

JOSEPH D. McDONALD, M.D., *Chairman*
PAUL HUMPHREY, M.D., *Vice-Chairman*
CHARLES X. McCALLA, M.D., *Secretary*
ROBERT H. RANG, M.D.
JOHN W. RIPLEY, M.D.
FRANK H. GREEN, M.D.
FLOYD A. BOYER, M.D.
ROBERT D. WILLIAMS, M.D.
FRED FLORA, M.D.
MILTON B. GEVIRTZ, M.D.
JOSEPH B. DAVIS, M.D.
JACK L. EISAMAN, M.D.
F. R. NICHOLAS CARTER, M.D.
NEAL E. BAXTER, M.D.

Medical Education and Licensure

Doctor Maurice Glock, President of the Indiana State Medical Association, was present at the first meeting on February 3, 1963, and suggested the following items which the Commission might consider:

1. The appraisal of straight interneships;
2. The relationship of citizenship to Licensure in this State;
3. Common Problems of the Medical Teaching Profession and the Practicing Profession;
4. A Proposed Expansion of the Student Loan Fund through a Guarantee Loan System;
5. Liaison with the State Medical Licensure Board;
6. Science Fair Problem;
7. Program of Life-Time Learning for Practicing Physicians.

The members of the Commission elected to serve on sub-committees are as follows:

1. Undergraduate and Graduate Education
 Dr. James B. Johnson and Dr. I. S. Templeton
2. Postgraduate Education
 Dr. Joel Salon and Dr. Franklin Beeler
3. Student Loan
 Dr. Kenneth Sherer and Dr. Lawson J. Clark
4. School Health
 Dr. Peter R. Petrich
5. Licensure
 Dr. Forrest R. LaFollette and Dr. Peter R. Petrich
6. Hospital and Nursing Home
 Dr. John Sterne

The members of the Commission believe there are four particular areas which will need constant study and re-evaluation.

They are:

(1). The Shortage of General Practitioners;
(2). Continuing Post-Graduate Education;
(3). Mutual Problems of the Teaching and Practicing Profession;
(4). Increased Contact with Medical Students.

HARRY KLEPINGER, M.D., *Chairman*
PETER R. PETRICH, M.D., *Vice-Chairman*
FORREST R. LaFOLLETTE, M.D., *Secretary*
JOHN STERNE, M.D.
BOYD K. BLACK, M.D.
ROBERT W. HARRIS, M.D.
I. S. TEMPLETON, M.D.
JAMES B. JOHNSON, M.D.
KENNETH E. SHERER, M.D.
LAWSON J. CLARK, M.D.
FRANKLIN BEELER, M.D.
ELTON R. CLARKE, M.D.
JOEL SALON, M.D.
JAMES R. CARPENTIER, M.D.

Special Activities

During the current year the Commission on Special Activities has held three formal meetings.

A study regarding the attendance at Medical Society Meetings was done. Simultaneously we made an inquiry into the manner of orientation of new members in the respective county medical societies.

Questionnaires regarding these two matters were sent to all component medical societies and replies were received from 66 societies.

The reasons revealed for a decline in attendance included:

A. Too many meetings
B. Interference with office hours
C. Lack of a good central meeting place
D. Lack of good scientific material in presentations
E. Generalized apathy towards meetings
F. An attitude of let the other fellow do it.

Suggestions made to improve attendance included:

A. The use of dinner meetings

B. Inclusion of the Doctor's wives in programs where possible

C. Creation of joint meetings with hospital staffs.

In the matter of the last item, joint meetings with hospital staffs, the Commission investigated the program in effect at Dade County (Miami), Florida, where the medical society and the staff societies of all hospitals meet together. Starting at about 4 p.m. the staff members of the respective hospitals meet in separate rooms, then eat together and have the medical society meeting in the evening—thus accomplishing in one day at one session what formerly extended throughout the month.

In the matter of orientation of new members, our questionnaire revealed that only four of the 63 reporting societies conducted sessions for indoctrination of new members. In all four instances attendance is compulsory and the societies feel that the sessions are quite valuable.

The Commission has recommended that the information obtained in these two surveys be made available to all the component medical societies.

In other activity the Commission investigated the possibility and desirability of creating a mutual fund to be sponsored by the State Medical Association in connection with investment of funds set aside by physicians as may be possible under the Keogh Act.

We met with Mr. William Watson of the Standard and Poor's Company of New York and we studied the brochures of the Beacon Investing Corporation which is sponsored by the six New England State Medical Associations and of the Nassau Physicians Guild Investing Company, Inc. of New York. We also had correspondence with the New York office of Standard and Poor's.

It was our opinion that, at the time of our study, the interpretation of the provisions of the Keogh Act was so unclarified that no intelligent decision could be made.

We quote a letter from Standard and Poor's dated May 10, 1963, regarding the Keogh Act. "It is a Little Too Early to be able to Answer you Directly as to whether there is a great Deal of 'Taking Advantage' of the provisions of the Act."

The Commission also made a study of the newly-passed Indiana Senate Act No. 398 called the "Medical Profession Corporation Act". It is our opinion that groups of practitioners may find it advantageous to incorporate under the provisions of this Act. We do not believe that this Act offers anything to the solo practitioner.

ELI GOODMAN, M.D., *Chairman*
NORMAN M. SILVERMAN, M.D., *Vice-Chairman*
EARL W. BAILEY, M.D., *Secretary*
JOSEPH E. COLEMAN, M.D.
C. PHILIP FOX, M.D.
JOHN SMITH, M.D.
ROBERT H. K. FOSTER, M.D.
JACK M. WALKER, M.D.
CLARENCE G. KERN, M.D.
ARTHUR KUHN, M.D.
DAVID C. GASTINEAU, M.D.
FREDERICK BIGLER, M.D.
GUY B. INGWELL, M.D.
WES SHANNON, M.D.

Aging

The Commission on Aging continues to emphasize the "Concept of Independent Living" in giving health care to the aged and chronically ill person and that every means possible should be made available for such services as are necessary to functionally restore him to self-sufficiency and independence.

The first major step in organizing a state-wide approach to the aging problem was May 15 when approximately one hundred leaders of community health and welfare organizations attended the "Institute on Aging" sponsored by the Indiana State Medical Association at Indianapolis.

The purpose of the institute was to explore and identify effective and economical methods in bringing a full complement of medical, nursing and social welfare services into patients' homes, and particularly the long-term patient. Out of the meeting came the recognition that a more effective utilization of existing services must be developed as well as the planning for organized home care programs at community level.

Lake and Miami County Medical Societies have taken the leadership and participated with other community agencies in planning, extending and strengthening the multifaceted features of home health care for the aged and chronically ill, as recommended by the Commission.

We commend the efforts of the Knox County Medical Society's "Chronic Medical Service" to improve the patient care in nursing homes and/or convalescent institutions.

The new Joint Council to Improve the Health Care of the Aged was created to include representatives of the Indiana State Medical Association, Indiana State Dental Association, Indiana Hospital Association and the Indiana Association for Licensed Nursing Homes. Our chairman has expended considerable time and energy in the organization of this very important coordinating council.

The Commission makes "A Statement about Health and Gerontology" as follows:

It is the privilege and duty of the health professions to explore the special factors on the health of the aged, to render expert opinion as to how to meet the challenges and to implement the necessary action. It is clearly in the interest of every citizen that the experts in health care be the ones to set the pace and direction of its progress. If

the health professions fail to meet the challenge, others will step in and fill the vacuum. In the seemingly endless agitation over the type of legislation necessary to meet the problems of medical care of the aged, little attention has been given to the thought that home medical care, as well as some of the other disciplines which we are developing on the grass roots level, may be the answer to our social challenge. We must seek to acquire a fuller understanding of the problems and implications of a citizenry which is growing older, to spread further knowledge of the problems involved and thereby broaden the base of our understanding and encourage sound planning. A sincere effort should be made to advance our social planning to keep pace with the well-known increase in life expectancy.

The committee has been active during the year and its final meeting was June 23.

NATHAN L. SALON, M.D., *Chairman*
LLOYD L. HILL, M.D., *Vice-Chairman*
FRANK M. HALL, M.D., *Secretary*
L. JOHN VOGEL, M.D.
C. PHILIP FOX, M.D.
DON LaFOLLETTE, M.D.
HARRY R. BAXTER, M.D.
WAYNE A. CROCKETT, M.D.
GLEN A. RAMSDELL, M.D.
WARREN ANDREW, M.D.
RALPH E. PLOUGHE, M.D.
F. S. CROCKETT, M.D.
GEORGE M. YOUNG, M.D.
N. C. JOHNS, M.D.
ANDREW C. OFFUTT, M.D.

Resolutions

Amendment to Article IV, Sec. 2, of the Constitution to be Voted on at Indianapolis Session, 1963.

At the 1962 annual convention at French Lick, the House of Delegates adopted the report of the Reference Committee on Amendments to the Constitution and Bylaws, in which the Reference Committee approved and recommended for adoption an amendment to Article IV, Section 2, of the Constitution, as follows: (the words added are italicized)

"Sec. 2. *Active Members.* The active members of this association shall be the members of the component county medical societies, *who hold an unlimited license to practice medicine, which is in full force and effect; provided, however, that each is a citizen of the United States of America or has filed his declaration of intention to beeome a citizen and his first citizenship papers are in full force and effect. No person shall be qualified for membership in a county society who is not qualified for membership in the Indiana State Medical Association* and no county medical society shall grant active membership therein on a basis that does not include membership in the Indiana State Medical Association."

This amendment was presented in open meeting on October 10, 1962, and was published in *The Journal* of the Indiana State Medical Association, issues of December, 1962, and September, 1963.

Resolution No. 1

Introduced by: COMMISSION ON MEDICAL ECONOMICS AND INSURANCE
Subject: IMPROVING PATIENT CARE

WHEREAS, The Indiana State Medical Association historically has been a leader in the improvement of patient care, and

WHEREAS, costs of medical care can not be properly judged without being related to the quality or effectiveness of patient care, and

WHEREAS, both subjects have been the object of special studies by various lay and professional agencies, and

WHEREAS, many separate efforts to improve patient care are being made, e.g., postgraduate physician programs, professional society meetings, Joint Commission on Accreditation of Hospitals, AMA-Nursing Home Association Accreditation Program, and

WHEREAS, Voluntary Health Insurance's expected growth will be in non-hospitalized medical services which places even more emphasis upon the capability of the physician, and

WHEREAS, the Indiana State Medical Association is the natural organization to provide needed leadership and coordination of the many separate efforts in Indiana;

NOW THEREFORE BE IT RESOLVED, that the House of Delegates instruct the appropriate Commission to make a study of all efforts and factors having a direct bearing upon improving the continuing educational programs for physicians and other activities which augment patient care and recommend any necessary, constructive changes which it deems feasible.

Resolution No. 2

Introduced by: COMMISSION ON MEDICAL ECONOMICS AND INSURANCE
Subject: DENTAL BENEFITS AND REPRESENTATION OFFERED BY BLUE SHIELD

WHEREAS, Dental Services composed a significant portion of Indiana's Total Health Care Bill in 1962 being $56,000,000 as compared to $154,000,000 for Hospital Services and $143,000,000 for all Physicians' Services, and

WHEREAS, the American Dental Association and its various state components have shown interest in prepayment of dental services, and

WHEREAS, Blue Shield has the organization and operating experience which would be valuable to a dental plan, and

WHEREAS, a dental plan would contribute increased business volume, contributing to greater operating efficiency with resultant benefits to both medical and dental patient-members, and

WHEREAS, professional dental opinions would be necessary in the conduct of a Dental Benefit Plan, and

WHEREAS, it is desirable to have all professional services included in Blue Shield;

NOW THEREFORE BE IT RESOLVED, That Indiana State Medical Association House of Delegates instruct those physicians who are Board Members of Blue Shield to act favorably on the inclusion of Dental Services under Blue Shield if the Indiana Dental Association should so desire;

BE IT FURTHER RESOLVED, that appropriate Indiana Dental Association representation upon the Blue Shield Board of Directors be approved, in the event that dental services benefits are offered by Blue Shield.

Resolution No. 3

Introduced by: COMMISSION ON MEDICAL ECONOMICS AND INSURANCE
Subject: RESOLUTION ENCOURAGING COUNTY MEDICAL SOCIETY'S INSURANCE COMMITTEE TO PERFORM REVIEW FUNCTION FOR INSURANCE PLANS

WHEREAS, there is an occasional need for a physician's analysis of insurance claims to determine if the clinical situation meets the contractural terms of the insurance coverage; and

WHEREAS, the present Blue Cross Physician's Advisory Committee is composed of five doctors

representing the clinical fields of Pathology, Radiology, Psychiatry, General Surgery and General Practice; and

WHEREAS, specialization by physicians frequently results in esoteric situations beyond the ken of the average physician; and

WHEREAS, County Medical Societies conduct local review committees for Blue Shield; and

WHEREAS, there exist local variances in medical facilities and patterns of clinical practice,

NOW, THEREFORE, BE IT RESOLVED: That the Indiana State Medical Association House of Delegates encourage County Medical Societies to offer this service of clinical review of questioned claims to the insurance industry;

BE IT FURTHER RESOLVED: That the Industry then be advised that such service is available on an individual county basis.

Resolution No. 4

Introduced by: DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY

Subject: REALIGNMENT OF DUES STRUCTURE

WHEREAS, Indiana State Medical Association has for the past twelve years supported a program of assistance to Indiana University School of Medicine through the National Fund for Medical Education and/or the American Medical Education Fund, and

WHEREAS, the approximate amount for the past few years has remained static (about $35,000 annually) because it is a compulsory portion ($10.00) of our dues structure, and

WHEREAS, the basis of this grant was intended to be judged upon the need, and

WHEREAS, funds from other sources, particularly the Federal Government, are increasingly available and administratively acceptable to the Medical School, and

WHEREAS, Indiana State Medical Association has a Student Loan Program which can be made much more effective if sufficient funds were made available,

NOW THEREFORE BE IT RESOLVED, that that amount of our dues structure which is now used to provide funds for American Medical Education Fund through compulsion, be retained in our dues structure but be used to provide necessary funds for an adequate Student Loan Program as well as support for the General Fund instead of being donated to American Medical Education Fund. That all contributions to American Medical Education Fund be on a voluntary basis and in addition to and outside of the dues structure.

Resolution No. 5

Introduced by: LAPORTE COUNTY MEDICAL SOCIETY

Subject: ESTABLISHMENT OF MEDICAL DEPARTMENT WITHIN THE STATE BOARD OF CORRECTIONS

WHEREAS, The State Board of Corrections of the State of Indiana has within its jurisdiction the health of an average of approximately 7,500 persons as inmates of its several correctional institutions; and

WHEREAS, The adequate medical care of these persons requires certain considerations in policy, selection of medical personnel, and procurement of medical supplies and equipment that are at variance with the usual non-medical policy, personnel, and procurement procedures generally employed;

NOW, THEREFORE, BE IT RESOLVED, by the LaPorte County Medical Society that the medical needs of inmates of the correctional institutions of the State Board of Corrections of the State of Indiana would be better met by the establishment of a medical department under the direction of a licensed physician within the State Board of Corrections; such department having authority for the selection of personnel, procurement of medical supplies and equipment; and

BE IT FURTHER RESOLVED, that this resolution be formally transmitted to the Indiana State Medical Association for consideration by the House of Delegates at the next session.

Resolution No. 6

Introduced by: CARROLL COUNTY MEDICAL SOCIETY

Subject: ADEQUATE CONSIDERATION OF REFERENCE COMMITTEE REPORTS

WHEREAS, The present procedure of presenting reports of Reference Committees and then voting on these reports at the same meeting allows insufficient time for studying these reports by the delegates;

AND WHEREAS, This procedure has in the past resulted in the passing of resolutions which, after due consideration, were considered undesirable;

AND WHEREAS, Many important decisions, which will require careful consideration, will be taken up by the House of Delegates of the Indiana State Medical Association in the near future;

NOW, THEREFORE, BE IT RESOLVED, That the second meeting of the House of Delegates be called for the sole purpose of presenting the reports of the Reference Committees and discussion of the reports; and that a third meeting of the House of Delegates be called for the sole purpose of casting and recording votes, as well as for the election of officers. No discussion will be presented at this third meeting, in order to conserve time and expedite the balloting.

AND BE IT FURTHER RESOLVED, That this Resolution be forwarded to the Headquarters Office of the ISMA for presentation to the Annual Meeting of the House of Delegates in October, 1963, and to be published in *The Journal* of the ISMA in the usual manner.

Scientific Exhibits

IRVIN H. SONNE, M.D., *New Albany, Chairman*

DIRECT PERCUTANEOUS NON-CATHETER LEFT AND RIGHT BRACHIAL ANGIOGRAPHY

Exhibitor: Thomas R. Marshall, M.D., University of Louisville School of Medicine, Dept. of Radiology, Louisville, Ky.

Co-exhibitors: J. T. Ling, M.D., R. Gonzalez, M.D., A. Hatam, M.D., University of Louisville School of Medicine, Louisville, Ky.

Attendant: Thomas R. Marshall, M.D.

Direct percutaneous non-catheter right brachial injection gives excellent visualization of the innominate, right vertebral and right common carotid arteries and the cerebral circulation. Injection of the left brachial artery gives visualization of the left vertebral, thoracic and abdominal aorta, renal arteries, and femoral arteries.

Right brachial artery injection has been termed cerebral angiography and left brachial artery injection has been termed pan-arteriography by us. The method consists of percutaneous insertion of a special 17 gauge vascular needle into the brachial artery in the antecubital fossa on a line 1 cm. above the epicondyles of the humerus. The needle is connected to an automatic pressure injector with a 3 mm. Ödman-Ledin catheter. A rapid cassette changer or an Elema roll film unit is used to make multiple exposures.

One hundred seventy-five patients have been examined by this method with no fatality or serious morbidity. This method will soon advance angiography to a routine radiological procedure.

THE NEWER ANTI-HISTAMINE AGENTS

Exhibitor: Rudolf E. Wilhelm, M.D., Dearborn, Mich.

Co-exhibitor: Wayne State University, Detroit

Attendant: Rudolf E. Wilhelm, M.D.

The attached booklet on "The Newer Anti-Allergic Agents," which is published in "*The Medical Clinics of North America*," 45: p. 887-906, July 1961, will form background material for this exhibit.

Newer Anti-Histamine Agents are classified into six different groups, according to chemical structure, side effects, duration of action. Merits of molecule manipulation are discussed. Other actions of anti-histamine drugs are studied.

This exhibit is designed to give practical help to the physician, who is overwhelmed by the multitude of anti-histamine preparations.

PERCUTANEOUS LEFT BRACHIAL AORTOGRAPHY

Exhibitor: Robert N. Ashby, M.D., Chicago Wesley Memorial Hospital, Chicago

Co-exhibitors: Bill G. Karras, M.D., Abram H. Cannon, M.D., Departments of Radiology, Chicago Wesley Memorial Hospital and Northwestern University School of Medicine

Attendant: Robert N. Ashby, M.D.

The exhibit consists of transparencies and captioned radiographs which show and describe the technic and results of percutaneous left brachial aortography. This technic provides visualization of the descending aorta, abdominal aorta, renal arteries and iliac arteries. This is accomplished by reversal of flow in the brachial-subclavian system by pressure injection in a retrograde direction through a percutaneously placed needle in the left brachial artery. No catheters or cut-downs are required. In 130 examinations performed in this manner, the method has been safe, reliable and simple to perform.

ACTIVITIES AND PROJECTS OF INDIANA'S FLYING PHYSICIANS

Exhibitor: Flying Physicians Association, Indiana Chapter

Attendant: Edward D. Miller, M.D., Ft. Wayne

Organized within the medical profession for those who have a medical interest in aviation.

OPERATIVE CHOLANGIOGRAPHY

Exhibitor: Charles H. Moore, M.D., Cincinnati

Co-exhibitors: Khamis Saba, M.D., and Good Samaritan Hospital, Cincinnati

Attendants: Charles H. Moore, M.D., Khamis Saba, M.D.

EXAMINATION OF THE STOMACH AND DUODENAL BULB WITH THE FIBERSCOPE

Exhibitor: F. Norman Vickers, M.D., Louisville General Hospital, Louisville 2, Ky.

Co-exhibitors: Thomas M. Marshall, M.D., Samuel H. Cheng, M.D., and University of Louisville School of Medicine

Attendants: Thomas H. Marshall, M.D., and F. Norman Vickers, M.D.

This exhibit shows correlation between the x-ray and gastroscopic findings with the fiberscope by means of color photographs taken through that instrument. Where available, histologic evidence is also shown. Diagnoses include: Benign gastric ulcer, gastric carcinoma, hemorrhagic aspirin gastritis, duodenal ulcer and gastric amyloidosis. Charts explaining the fiber optic principle, indications and exhibitors' results with the fiberscope are also shown.

TUMORS OF THE GLOMUS JUGULARE OR THE GLOMUS TYMPANICUM PRESENTING IN THE MIDDLE EAR

Exhibitor: Kenneth L. Schermer, M.D., Methodist Hospital, Indianapolis

Co-exhibitors: Marvin D. Dziabis, M.D., Edwin E. Pontius, M.D., and Ralph J. McQuiston, M.D., all of Indianapolis

Attendants: K. L. Schermer, M.D., and M. D. Dziabis, M.D.

The anatomical, pathological, and clinical aspects of tumors arising from the glomus jugulare or glomus tympanicum are presented. Synonymous terms used for these tumors include "granular cell myoblastoma" of the ear canal, nonchromaffin paraganglioma of the middle ear, or chemodectoma of the middle ear.

Five cases diagnosed and treated in the past six years in our institution are presented. These cases are documented with clinical and histopathological data. These five cases were all treated surgically by radical endaural mastoidectomy by one surgeon. One received postoperative irradiation. Follow-up information indicates no evidence of local or metastatic recurrence in any case.

A review of the literature is summarized and previously reported cases are presented in tabular form. This includes modes of treatment and available follow-up data. A comparison is made with the therapy advocated by others.

ARCHITECTURAL BARRIERS— A NATIONAL PROGRAM

Exhibitor: Indiana Society for Crippled Children & Adults, Inc., Indianapolis

Attendants: James A. Carter, Ralph W. Werking, Jr., and Mrs. Donald Elfers

This exhibit will pictorially, graphically, and by use of a prefabricated display show the results of a nation-wide survey into existing Architectural Barriers. These are barriers of significant importance to the aged, cardiac, stroke and to the physically handicapped, etc. Distribution of materials for use in community surveys and follow-up will be made to those expressing an interest.

OBSERVATIONS OF SYNCARDIAL THERAPY

Exhibitor: Robert L. Dilts, M.D., Indianapolis

Attendant: Robert L. Dilts, M.D.

Syncardial therapy is a controlled passive forward compression of the pulse wave, electronically synchronized with EKG R-wave. Displayed are case histories with accompanying color photographs of several vascular disease states treated with Syncardon. The exhibitor lists the conditions successfully treated with Syncardon. Among these are the following: frost bite, Buerger's disease, arteriosclerotic and diabetic pre-gangrene, thrombophlebitis, and traumatic lesions. Also presented are the various types of pulse waves observed in different vascular lesions.

STUDIES IN MYASTHENIA GRAVIS: 500 CASES

Exhibitor: Indiana State Chapter Myasthenia Gravis Foundation, Indianapolis

Attendants: Mrs. Rex G. Campbell, Miss Janice Berlin and Bob Morrison

DOUBLE BLIND EVALUATION OF CARISOPRODOL COMPOUND IN OPERATIVE AND NON-OPERATIVE HEMORRHOIDAL DISEASE

Exhibitor: Martin Macht, M.D., Cincinnati, Ohio

Co-exhibitors: Jack Selzer, M.D., University of Cincinnati Medical School, and Wallace Laboratories

Attendant: Martin Macht, M.D.

The objective measurement of pain is most difficult because of varying pain thresholds of individuals and different types of pain. A traumatic pain of uniform intensity is provided in postoperative hemorrhoidectomy patients and ambulatory patients with hemorrhoidal disease. The analgesic properties of carisoprodol compound were investigated in a double blind study using placebos with these patients. The drug was found to be most useful and the results unequivocal.

SEVEN YEARS' EXPERIENCE WITH TRANQUILIZERS

Exhibitor: Veronica Pennington, M.D., Jackson, Miss.

Attendant: Veronica Pennington, M.D.

Studies begun in 1954 and continuing to date in 19 published papers, with their charts and summaries, including indications, side effects, dosage, provide the material for this exhibit. Reprints of these 19 studies and mimeographed copies of the tabulated results and findings combined into one paper can be provided for distribution. Abstract

paintings (by the author) of hallucinations and brain biochemistry (enzymes and chemicals), as related to the subject of the 19 studies, will be shown. Paintings of a woman in an anxiety state and in a relaxed, composed state, as related to the material of the exhibit, will add to the visualization of the studies.

NEUROVASCULAR COMPRESSION SYNDROMES AND VERTEBRAL "STEEL" SYNDROME

Exhibitor: Erich K. Lang, M.D., Methodist Hospital, Indianapolis

Co-exhibitors: Theodore Luros, M.D., Carl Hann, M.D., Michael Manzie, M.D., John V. Thompson, M.D.

Attendant: Erich K. Lang, M.D.

Selective percutaneous Seldinger arteriography is used for the selective demonstration of the subclavian arteries and the vertebral arteries. Arteriograms carried out in various positions utilizing a mid position, a modified Addson maneuver, and a full Addson maneuver to demonstrate the subclavian artery in functional appearance. The classical compression points of the scalenus anticus tunnel, the pectoralis minor tendon crossing, the cervical rib compression and the thoracic outlet compression are thus demonstrated. The method allows an excellent functional appreciation of the artery. This cannot be reduplicated by open exploration since the various positions cannot be assumed by a patient under anesthesia and properly draped for a surgical procedure. Hence this method allows the only reliable demonstration of minor compression effects upon the subclavian artery in certain functional positions.

The "vertebral artery steel syndrome" is readily demonstrated by this method. Arteriography of the aortic arch will demonstrate refilling of the peripheral portion of the subclavian artery via the vertebral artery and the thyro-cervical trunk anastomosis. Clinically these patients will complain of symptoms secondary to deviation of blood supply from their basilar system to the affected subclavian artery. Examples for the various types of lesions are shown.

ARTERIOGRAPHIC APPEARANCE OF BLADDER TUMORS BEFORE AND AFTER COBALT 60 THERAPY

Exhibitor: Erich K. Lang, M.D., Methodist Hospital, Indianapolis

Co-exhibitors: William Niles Wishard, M.D., Myron Nourse, M.D., Jack Mertz, M.D.

Attendant: Erich K. Lang, M.D.

Seldinger arteriographic technics are utilized to demonstrate the arterial supply of bladder tumors. This method allows an excellent assessment of the depth of infiltration of bladder tumors into the muscular wall or beyond the perivesical fat tissues. The method is utilized in follow-up examinations after completion of Cobalt 60 therapy. The characteristic appearance of the heavily irradiated bladder is demonstrated. The classical telangiectatic vessels are readily differentiated from recurrent tumor with its classical tumor supply vessels. This method serves particularly to differentiate bleeding from telangiectatic vessels of a heavily irradiated bladder from bleeding seen with recurrent bladder tumors.

COLLATERAL SUPPLY TO THE INTERNAL CAROTID ARTERY

Exhibitor: Erich K. Lang, M.D., Methodist Hospital, Indianapolis

Co-exhibitors: Basil Fausset, M.D., Carl Hann, M.D., Theodore Luros, M.D.

Attendant: Erich K. Lang, M.D.

Forty-seven cases of arterial thrombosis of the internal carotid artery are analyzed. Carotid arteriograms demonstrate re-opacification of the internal carotid artery at the siphon segment via collaterals. The major collaterals are the ophthalmic artery, the mid-meningeal artery and the pterygopalatine artery. Anastomotic channels over these arteries suffice to adequately re-opacify the internal carotid system.

Radioisotope dilution studies demonstrate a greater circulating blood flow to the affected brain hemisphere than suggested by the demonstrated collateral vessels. It is hence concluded that additional collateral supply via the circle of Willis and particularly over collaterals which are not demonstrable arteriographically is responsible for the additional circulating blood flow to the affected hemisphere. The magnitude of collateral flow is best appreciated on isotope flow studies.

OCCUPATIONAL HEALTH NEEDS THE FAMILY PHYSICIAN

Exhibitor: American Medical Association Council on Occupational Health

Attendant: Mr. Lee N. Hames, Assistant Secretary, Council on Occupational Health

Illustrates points at which the family physician and the plant physician have contact—points which can and should be areas of cooperation and teamwork. Areas of interest covered are rehabilitation, absenteeism, job placement and transfer, illness and injury reports, professional relations and medical society relations. General principles are outlined.

The exhibit also promotes and makes available without charge to interested physicians the AMA "Guide to Small Plant Occupational Health Programs," which discusses the items on this exhibit in greater detail. This exhibit was developed by

the Council on Occupational Health over a period of years to create better understanding and liaison between the physician in occupational health, especially the man doing small plant work, and his fellow physician in general practice.

PROTECT YOUR PATIENT'S HEART—
Prevent Bacterial Endocarditis

Exhibitor: U. S. Public Health Service, Heart Disease Control Program

Attendants: Jean Poitras, M.D., Chief, Rheumatic Fever Section, Heart Disease Control Program, U. S. Public Health Service

The exhibit alerts physicians to the need for identifying patients with cardiovascular disease, and to know the problems of these patients. The exhibit uses a lighted figure to illustrate how trauma and operative procedures send showers of bacteria into the bloodstream which may cause the development of bacterial endocarditis in patients with valvular heart disease, and consequently disability or death. It also points up the special procedures to use with these patients.

Technical Exhibitors

ABBOTT LABORATORIES — **Booth 107**
14th and Sheridan Road — North Chicago, Ill.
R. D. Hickman, Bill Castner, R. D. Conwell, James A. Wilson, C. W. Hall

AKRON SURGICAL HOUSE, INC. — **Booth 70**
1927 N. Capitol Ave. — Indianapolis 2

AMES COMPANY, INC. — **Booth 79**
819 McNaughton Ave. — Elkhart, Ind.
William E. Furrow

ARNAR-STONE LABORATORIES, INC. — **Booth 51**
225 E. Prospect Ave. — Mount Prospect, Ill.
Wayne Snyder, W. H. Snider

ASSOCIATION OF AMERICAN PHYSICIANS AND SURGEONS — **Booth 82**

AUTOMATED MEDICAL SYSTEMS — **Booth 117**
3809 Washington Street — Evansville 15, Ind.
Virgil T. Hall, Mrs. V. Hall

AYERST LABORATORIES — **Booth 40**
2304 Wilson Blvd., Suite 206 — Arlington, Va.
Jack Minton, Frank Bojarski, Mike Gurchiek, Sam Muir

BAKER BROTHERS — **Booths 75 & 76**
2039 N. Capitol Ave. — Indianapolis 2
Frank M. Jones, Mrs. Frank Jones, Tom Jones

BAKER LABORATORIES, INC. — **Booth 60**
3940 Euclid Avenue — Cleveland 15, Ohio
Marc Connor

BLACK & SKAGGS ASSOCIATES, INC. — **Booth 3**
(Professional Management)
181 North Ave. — Battle Creek, Mich.
Harold L. Neff, Paul D. Evans, Jerry Meadors, John B. Hogan

THE BORDEN COMPANY — **Booth 95**
350 Madison Avenue, #202 — New York 17, N. Y.
Ed White, John Stafford

BURROUGHS WELLCOME & CO., U. S. A., INC. — **Booth 93**
1 Scarsdale Road — Tuckahoe 7, N. Y.

CARNATION COMPANY — **Booth 98**
5045 Wilshire Blvd. — Los Angeles 36, Cal.
C. L. Schultz, Howard Thomas, Edwin L. Robertson

CENTRAL BRACE COMPANY OF INDIANA — **Booth 72**
1618 N. Illinois St. — Indianapolis
Kermit K. Taylor, Miles A. Hobbs, T. M. Davidson

CIBA PHARMACEUTICAL COMPANY — **Booth 99**
556 Morris Avenue — Summit, N. J.

THE COCA-COLA COMPANY — **Booth 47**
P.O. Drawer 1734, 310 North Ave., N.W., Atlanta 1, Ga.

CONTOUR SALES — **Booths 56 & 57**
3728 E. 38th St. — Indianapolis
Ed Olin, Bertie Bewley

CURTIS AND FRENCH, INC. — **Booth 85**
444 W. 16th St. — Indianapolis 2
D. F. Curtis, C. E. McCain, Don Graves

DAIRY COUNCILS OF INDIANA — **Booth 100**
50 S. Parker Ave. — Indianapolis 1
Mrs. Lillian Staub, Fern Ferneau, Mrs. Barbara Morley, Mrs. Lois Smith, Mrs. Hazel Burnett

DOME CHEMICALS, INC. — **Booth 26**
125 West End Avenue — New York 23, N. Y.

C. DOUGLAS ENTERPRISES, INC. — **Booth 105**
P. O. Box 1455 — Indianapolis

ENCYCLOPEDIA AMERICANA — **Booth 123**
919 N. Michigan Ave. — Chicago 11, Ill.
Armin Eastman, Jerry L. May

ENCYCLOPEDIA BRITTANICA, INC. — **Booth 110**
425 N. Michigan Ave. — Chicago 60601, Ill.
C. N. Cobb, E. S. Raffey

MARSHALL ERDMAN AND ASSOCIATES, INC. — **Booth 113**
5117 University Avenue — Madison 5, Wisc.

GEIGY PHARMACEUTICALS — **Booth 35**
P. O. Box 430 — Yonkers, N. Y.
R. LeCompte, R. Brown, A. Casper, W. Zinn, J. Cook, G. Kile, W. Smith, W. Stewart

GERBER PRODUCTS COMPANY — **Booth 88**
445 State St. — Fremont, Mich.
Joe Madigan

GREAT BOOKS WITH THE SYNTOPICON — **Booth 45**
425 N. Michigan Ave. — Chicago 11, Ill.
V. Walsh, J. Knapp, J. Schneider

H. J. HEINZ COMPANY — **Booth 102**
P. O. Box 57 — Pittsburgh 30, Pa.

INDIANA BELL TELEPHONE COMPANY — **Booth 96**
240 N. Meridian St. — Indianapolis 4

INDIANA BRACE SHOP, INC. — **Booth 49**
72 W. New York St. — Indianapolis 4
Jerry Wilkins, Clyde Peach, Bill Miller

INDIANA NATIONAL BANK — **Booth 7**
3 Virginia Ave. — Indianapolis 9

INDIANA STATE PODIATRY ASSOCIATION — **Booth 115**

INDIANA SURGICAL INC. — **Booth 46**
5541 E. Washington St. — Indianapolis 19

INDIANAPOLIS ARTIFICIAL LIMB CORPORATION — **Booth 94**
959 N. Pennsylvania St. — Indianapolis

INDIANAPOLIS PHARMACAL COMPANY — **Booth 120**
3501 Brookside Parkway, South Drive — Indianapolis
Max P. Hull, Abe Kendell

LEDERLE LABORATORIES — **Booth 141**
Pearl River, New York

ELI LILLY & COMPANY — **Booth 106**
P. O. Box 618 — Indianapolis 6
H. O. Johnson, R.Ph., Colville, R.Ph., L. L. Neel, R.Ph., N. L. Stephenson, R.Ph.

J. B. LIPPINCOTT COMPANY — **Booth 91**
E. Washington Square — Philadelphia 5, Pa.
James H. Emerson

LOMA LINDA FOOD COMPANY — **Booth 68**
Box 388 — Mount Vernon, Ohio
W. A. Weaver

P. LORILLARD COMPANY — **Booth 28**
200 E. 42nd St. — New York 17, N. Y.
H. G. Stern, M. L. Baker

THE S. E. MASSENGILL, COMPANY — **Booth 74**
527 Fifth St. — Bristol, Tenn.
E. L. Smith, R. J. Liddy, J. D. McLain, Ed Manson

McNEIL LABORATORIES, INC. — **Booth 77**
Camp Hill Road — Fort Washington, Pa.
W. C. Dollens

MEAD JOHNSON & COMPANY — **Booth 111**
Evansville 21 — Indiana

MEDCO PRODUCTS COMPANY, INC. — **Booth 104**
3603 E. Admiral Place, P. O. Box 3275 — Tulsa 12, Okla.

THE MEDICAL PROTECTIVE COMPANY — **Booth 58**
Station "A", Box 2021 — Fort Wayne, Ind.
Kenneth W. Moeller

MEDICAL SERVICE BUREAU — **Booth 78**
(Div. of Indiana Bank & Trust) — Fort Wayne, Ind.
Edwin R. Allen, Thomas Holland

MERCHANTS NATIONAL BANK AND TRUST CO. — **Booth 65**
11 S. Meridian Street — Indianapolis
Howard Sites, Ellwood W. Lewis

MERCK SHARP & DOHME — **Booth 92**
West Point, Pennsylvania
K. B. McDill, H. A. Pahlke, D. C. Abbitt, P. E. Furnish

MERRILL LYNCH, PIERCE, FENNER & SMITH, INC. **Booth 142**
114 N. Pennsylvania Indianapolis 4
Thomas J. Conboy, Thomas J. McAllister, Ernest A. Andregg

MILEX-ALPHA PRODUCTS **Booth 41**
7814 Churchill St. Morton Grove, Ill.

MODERN DRUGS, INC. **Booth 114**
4202 E. New York Street Indianapolis 1
Kenneth E. Hoy

MUNCIE AVIATION CORPORATION **Booth 64**
P. O. Box 577 Muncie, Ind.
Paul E. Rupprecht

MUTUAL BENEFIT LIFE **Booth 66**
Newark, N. J.
Norm Swanson, C. Waldo Bryant, Evan S. "Red" Stuart

MUTUAL MEDICAL INSURANCE, INC. **Booth 80**
(The Blue Shield Plan)
110 N. Illinois Street Indianapolis
L. E. Converse, Richard C. Kilborn

NATIONAL DRUG COMPANY **Booth 50**
4663-85 Stenton Avenue Philadelphia 44, Pa.

NORTH AMERICAN PHARMACAL INC. **Booth 29**
6851 Chase Road Dearborn, Mich.

ORGANON, INC. **Booth 33**
West Orange, New Jersey
Irv Dorris

ORTHO PHARMACEUTICAL CORPORATION **Booth 62**
Raritan, New Jersey
E. Gunnar Tysklind, M. C. Hurley

PARKE, DAVIS & COMPANY **Booth 6**
P. O. Box 118—R. P. Annex Detroit 32, Mich.

JOHN H. PAYNE AND ASSOCIATES **Booth 5**
318 Hume Mansur Building Indianapolis 4

PEPSI COLA BOTTLING COMPANY **Booth 2**
1030 E. New York Indianapolis
Wayne Shuler, Kathryn Shuler

PFIZER LABORATORIES **Booth 83**
235 E. 42nd St. New York 17, N. Y.

PITMAN-MOORE COMPANY **Booth 112**
P. O. Box 1656 Indianapolis 6
Charles Rongey, Bill McCrory, Bill Hoy

QUAKER CITY PHARMACAL COMPANY **Booth 37**
1034 So. 54th St. Philadelphia, Pa. 19143
Robert H. Lacy, Sr., D. James Wood

R. J. REYNOLDS TOBACCO COMPANY **Booth 38**
Winston-Salem, North Carolina
C. A. Burgess, J. M. Herbert, J. E. Harper

A. H. ROBINS COMPANY, INC. **Booth 86**
1407 Cummings Drive Richmond 20, Va.
James McKinney, Joseph Fuzy

ROCHE LABORATORIES **Booth 110**
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J. B. ROERIG AND COMPANY **Booth 59**
235 E. 42nd Street New York 17, N. Y.

ROSS LABORATORIES **Booth 109**
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Bill Bolling, Don Turner

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David M. Beveridge, Morris V. Hale

SANDOZ PHARMACEUTICALS **Booth 116**
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W. B. SAUNDERS COMPANY **Booth 87**
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Gerald D. Miller

SCHERING CORPORATION **Booth 143**
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William Rosner, Robert Cunningham, Rollan Perry, Edwin Leinhos, David Kauffman, Chris Lemke

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E. Guy Smith, Robert Thayer, Frank A. Emge

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John Wells, Joseph C. Kane

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THE STUART COMPANY **Booth 48**
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J. Nichol, R. Smith

SUPERIOR PHARMACAL COMPANY **Booth 71**
440 Maryland Street Dayton 4, Ohio
Ernie Bramigk, Margaret Bramigk, Mike Uellmen, Hank Allbock, George Monroe

THOMSON & McKINNON **Booth 97**
200 Circle Tower Bldg. Indianapolis 4
John Hopkins

TRENT PHARMACEUTICALS, INC. **Booth 81**
233 Broadway (Woolworth Bldg.) New York 7, N. Y.

S. J. TUTAG & CO. **Booth 24**
19180 Mt. Elliott Ave. Detroit 34, Mich.
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WINTHROP LABORATORIES **Booth 42**
1450 Broadway New York 18, N. Y.
Moody Cross, H. H. Farnsworth, J. E. Hartman, J. L. Jones

W-T-S PHARMACEUTICALS **Booth 101**
P. O. Box 1212 Rochester 3, N. Y.
Kenneth Squires, Paul Zachow

CONVENTION SECTION

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Closed Circuit, Color TV Programs To be Presented at ISMA Convention

PHYSICIANS attending the annual meeting of the Indiana State Medical Association this year will be able to view four clinical demonstrations on color television.

The programs will be presented on October 16 and 17 over the closed circuit television facilities of Smith Kline & French Laboratories, of Philadelphia. It will be the first appearance at a meeting of the Indiana medical group for SK&F's video team.

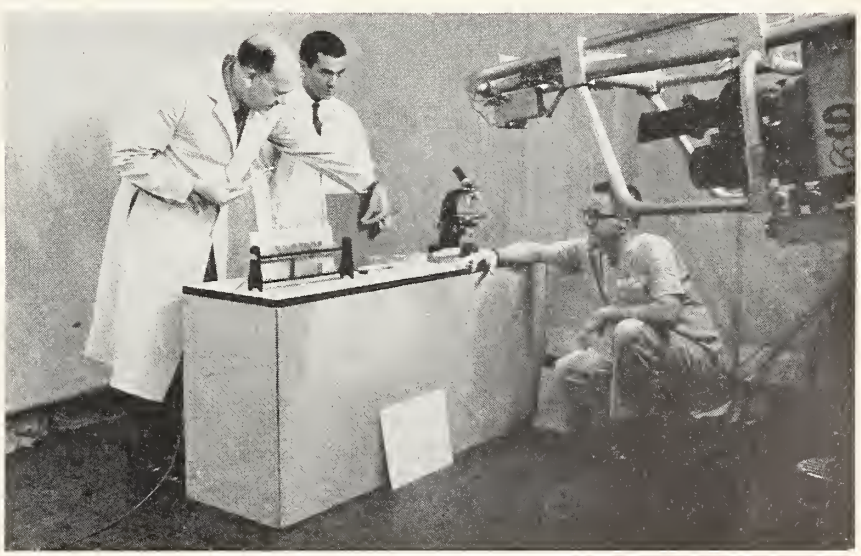
Scheduled for presentation are programs on "Diagnostic Aids in Digestive Diseases," from 9 to 10 a.m. October 16, Philip A. Christiansen, M.D., moderator; on "Common Low Back Problems," 10:30 to 11:30 a.m., the same day, Robert M. Palmer, M.D., moderator; on "Neurological Examination" from 9 to 10 a.m. October 17, Philip T. White, M.D., moderator and on "The Artificial Kidney" from 10:30 to 11:30 the same day, George T. Lukemeyer, M.D., moderator.

Charles Fisch, M.D., heads the television committee of the ISMA which planned the program. The demonstrations and discussions will originate in a temporary studio at the University of Indiana Medical Center and will be beamed to the Egyptian Room of the Murat Temple where the picture will be projected onto a 9 x 12 foot screen for convenience in viewing.

The moderator for each program will be situated in the Egyptian Room, and a party line type audio hookup will enable him to transmit questions from the audience to the participants at their remote location.

SK&F's mobile television equipment will arrive in Indianapolis on October 12 to begin three days of preparation for the telecasts. Participants will rehearse their presentations on October 15.

Smith Kline & French has been presenting postgraduate medical education programs over color television at medical meetings since 1949. At the American Medical Association meeting in Atlantic City that year SK&F was the first to produce a non-experimental color telecast. Last year, SK&F's color video team scored another dramatic television first by presenting a color program from England by way of the communications satellite Telstar I to physicians attending the XII International Congress of Dermatology.



SMITH KLINE & FRENCH color television camera moves in for closeup of a diagnostic demonstration by a physician during a telecast from Philadelphia to the American Medical Association meeting in Atlantic City this year. Television floor director Richard Getz, who is assisting with the ISMA program, crouches nearby to assist if necessary. (The physician is Joseph Lee Hallander, M.D., Professor of Medicine at the Schools of Medicine, University of Pennsylvania.) Boom extending in front of the camera was specially designed by SK&F video engineers for televising surgery.

Doctors Who Have Contributed to the Building of the New Home of ISMA

(As of July 31, 1963)

ADAMS COUNTY

Beaver, Norman E.
Boze, Robert L.
Burk, James M.
Carroll, John C.
Freeby, C. William
Kohne, Gerald J.
Luginbill, Howard M.
Parrish, Richard K.
Reppert, Roland L.
Rich, Norval
Schetgen, J. V.
Terveer, John B.
Zwick, Harold F.

ALLEN COUNTY

Aiken, Arthur F.
Aiken, Nevin E.
Anderson, Ernest
Andrew, Jerald L.
Arata, Justin E.
Ball, John R.
Baltes, Joseph H.
Barch, John W.
Bash, Wallace E.
Baumgartner, Jeraldine
Beams, Ralph H.
Beierlein, Karl M.
Beights, Raymond S.
Bergendahl, Emil H.
Beutler, Theodore V.
Billingsley, John S.
Blichert, Peter A.
Bossard, John W.
Bowers, Gah T.
Brandt, William E.
Bromley, Luman W.
Brosius, Robert H. W.
Brown, Frederic W.
Bryan, Franklin A.
Buckner, George D.
Chambers, Alan R.
Cutshaw, James
Clark, William R.
Cochran, Harry A., Jr.
Connelly, Richard D.
Cooney, Charles J.
Cottrell, Robert F.
Craig, Richard M.
Culp, John E.
Dunstone, Harry C.
Emme, Richard W.
Farquhar, John S.
Ferguson, Arthur N.
Fichman, Abraham M.
Flaherty, Robert A.
Foy, Hayward W.
Frankhouser, Charles M. A.
Fullam, Richard G.
Gerding, William J.
Gladstone, Naf H.
Glassley, Stephen H.
Glock, Maurice E.
Glock, Wayne R.
Gould, John C.
Graham, George M.
Graham, James C.
Griest, Walter D.
Hackett, Walter G.
Haffner, Herman G.
Hamilton, Emory D.
Harless, Fred
Harvey, Harry C.
Hasewinkle, August M.
Hastings, Warren C.
Hattendorf, Anton P.
Havens, Russell E.
Hershberger, Philip G.
Hickman, Donald M.
Hillery, Robert L.
Hipskind, Richard E.
Hoffman, Arthur F.
Holsinger, Robert E.
Humphreys, John L.
Jackson, John F.
Jontz, Joe G.
Juergens, Richard B.
Jurgensen, Walter T.
Karol, Herbert J.
Keck, Carleton A.
Kent, Richard N.
Keyes, Robert C.
Kimbrough, Robert F.
Kleifgen, William A.
Ladig, Donald S.
Lampe, Elfred H.
Land, Francis L.
Laycock, Richard M.
Leming, Ben L.
Lenk, George G.
Lloyd, Robert P.
Lohman, Robert M.
Lyon, William C.
Mackel, Frederick O.
Manning, George C.
McCoy, Roy R.
McDowell, George A.
McEachern, Cecil G.
Mercer, Samuel R.
Meyer, Theodore O.
Michaelis, Stephen C.
Miller, Edward D.
Miller, H. Paul
Miller, Mahlon F.
Miller, Orval J.
Miller, Richard H.
Miller, Robert B.
Miller, William J.
Moats, Carl F.
Moeller, Victor C.
Moravec, Arthur E.
Morey, Edwin E.
Mueller, Lawrence W.
Murdock, Harvey L. (S)
Nill, John H.
Nolan, Gerald R.
O'Brian, John F.
O'Rourke, Carroll
Oyer, John H.
Painter, Donald S.
Parker, Carey B.
Parrot, Donald J.
Pauly, Leonard R.
Pearson, Huey L.
Perrin, Kermit F.
Perry, Frederic G.
Pickett, Merle E.
Ponczek, Edward J.
Popp, Milton F.
Powell, M. Jack
Priddy, Marvin E.
Rissing, Walter J.
Roser, Arthur J.
Rossiter, Dudley L.
Rothberg, Maurice
Sahlmann, Hans
Salon, Harry W.
Salon, Nathan L.
Schlademan, Karl R.
Schloss, Robert P.
Schmidt, Eugene E.
Schmoll, Robert J.
Schoen, Frederic L.
Scoins, William H.
Senseny, Eugene F.
Sherwood, J. Vincent
Shinabery, Lawrence
Sidell, James P.
Smith, Philip L.
Snyderman, Sanford C.
Somers, Gerald H.
Spencer, C. Herbert
Stanley, Robert G.
Stauffer, Richard C.
Steigmeyer, David J.
Stier, Paul L.
Stucky, Jerry L.
Sullivan, Robert E.
Tennant, David L.
Terrill, Richard W.
Ungemach, Willo F.
Vogel, Lloyd A., Jr.
Ward, Gerald F.
Weber, John R.
Wick, Alfred A.
Williams, A. Berniece
Wilson, Leslie
Wilson, Roland B.
Worley, Ansel C.
Wyatt, James L., III
Zweig, Elmer S.

New Haven

Dahling, Clemens W.
Dahling, Fred W.
Hoetzer, Eldore M.
Stumpf, Edwin E.
Wade, Reynolds W.

Woodburn

Miller, Kenneth D.
Bichacoff, Billie D.

BARTHOLOMEW-BROWN COUNTIES

Adler, David L.
Beggs, Lowell F.
Biggs, William
Clay, Eleanor
Daugherty, Forest D.
Dugan, Thomas
Echsner, Herman J.
Gammell, Lindley L.
Henry, Alvin L.
Knotts, Halleck S.
Knotts, Slater
Krueger, Robert B.
Macy, George W.
Marr, Griffith
McCullough, Henry G.
Mohler, Floyd W.
O'Bryan, Richard B.
Ranck, Benjamin A.
Rau, Charles A.
Reid, Robert M.
Richmond, Harold W.
Ryan, William J.
Schmitt, Richard K.
Schneider, Kenneth D.
Seibel, Robert M.
Snapp, Richard A.
Teal, Dorothy D.
Warshaw, Seymour
Weinland, George C.
Williams, Earl K.
Williams, Everett W.
Zaring, Byron K.

BENTON COUNTY

McKinney, Donald L.

BOONE COUNTY

Bailey, Lawrence S.
Honan, Paul R.
Kern, Clarence G.

CARROLL COUNTY

Adams, Max R.
McLaughlin, James R.
Petry, T. Neal
Van Kirk, John
Wagoner, George W.
Wise, Charles L.

CASS COUNTY

Bailey, Earl W.
Bean, Joseph S.
Burnett, Paul C.
Cheng, Sylvia F.
Chu, Johnson C. S.
Dutchess, C. Toney
Eckert, Russell A.
Glendening, Richard L.
Hall, Bernard R.
Hedde, Eugene L.
Hillis, Lowell J.
Hochhalter, Marian
King, Jay M.
Maschmeyer, Robert H.
Morrical, Russell J.
Newcomb, William K.
Phipps, Elwood B.
Winter, Donald K.

CLARK COUNTY

Goodman, Eli
Jones, David H.
Mudd, Joseph P.
Regan, George L.
Willner, Alan
Wolverton, George M.

Jeffersonville
Carr, Joseph H.
Greene, William R.
Bizer, Mier A.
Havens, A. Lyle
Havens, Thomas R.
Reed, Edsel S.
Thompson, Walter

CLAY COUNTY
Bond, Walter C.
Buell, Forrest R.
Garvin, Donald B.
Maurer, J. Frank
Maurer, Robert M.
Mehne, Richard G.
Moon, Charles E.
Shattuck, John C.
Webster, Robert K.

CLINTON COUNTY
Beardsley, Frank A.
Carrel, Francis E.
Dykhuizen, Theodore A.
Flora, Fred W.
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Hedgcock, Robert A.
Stout, H. T.
Waits, Chester L.

DAVIESS-MARTIN COUNTIES
Farris, John J.
Norton, Horace O.
Rohrer, James R.

DEARBORN-OHIO COUNTIES
Aldred, Allen W.
Baker, Leslie M.
Conrad, Henry W.
Fagaly, William J.
Fessler, Gordon S.
Frable, Frank L.
Houston, Fred D.
Hunter, Lowell G.
Irmscher, George
Jackson, John K.
McNeely, Matthew J.
Morrison, George G., Jr.
Olcott, Charles W.
Pfeifer, James M.
Streck, Francis A.
Weisenberger, Brockton L.

DECATUR COUNTY
Acher, Robert P.
Callaghan, Winship C.
Dickson, Dale D.
Harkcom, Harry E.
Miller, James C.
Morrison, James T.
Overpeck, Charles
Porter, Robert A.
Shaffer, William R.
Walker, Louis

DE KALB COUNTY
Carpenter, Ramesh S.
Coleman, Floyd B.
Covell, Harry M.
Hines, Archie V.
Hines, John H.
Hippensteel, Harland V.
Jinnings, Loren E.
Kantzer, Floyd B.
Nason, Robert A.
Novy, Charles A.
Nugen, Harold
Rogers, Evered E.
Showalter, John P.
Wills, Max
Weirich, Charles I.

DELAWARE-BLACKFORD COUNTIES
Brown, Stewart D.
Burns, Paul E.
Hammond, Keith
Hinchman, Jean F.
Hill, Howard E.
Hill, Robert E.
Hurley, John R.
Ko, Richard C. B.
Mathewson, R. C.
Moss, Mavor J.
Puterbaugh, Karl E.
Tucker, Oral A.
Ware, Herbert

Hartford City
Dodds, James U.
Dudgeon, Charles A.
Jackson, Dean B.
Owsley, Guy A.
Parks, George O.
Werry, Leslie E.
Wierzalis, Edward F.

Muncie
Adams, Julia L.
Adams, William B.
Alvey, Charles R.
Ball, Clay A. (S)
Ball, Phillip
Benken, Lawrence D.
Bergwall, Warren L.
Bettig, A. C.
Bibler, Henry E.
Botkin, Clyde G.
Botkin, Thomas
Brown, Leland G.
Brown, Thomas M.
Burwell, Stanley W.
Butterfield, Robert M.
Butz, Ralph O.
Clevenger, Joseph H.
Cochran, Robert B.
Collins, Margaret C.
Covalt, Wendell E.
Cooper, John
Cullison, John L.
Cure, Elmer T.
David, Geo.
Deutsch, William
Dunning, Thomas W.
Funk, John W.
Galliher, Marjorie J.
Garling, Luvern C.
Geckler, Charles E.
Gibson, Robert K.
Greiber, Marvin F.
Gustafson, Milton
Hall, Robert S.
Hayes, Theodore R.
Henderson, Ramon A.
High, Ralph L.
Holmes, John L.
Hostetter, Irwin S.
Imhof, Joseph D.
Gill, Thos. A
Christie, Robt. W.
Kammer, Grace C.
Kammer, Walter F.
Kirshman, Forrest E.
Koss, K. William
Laduron, Jules
Lowry, Donald J.
McClintock, James A.
McCoy, George E.
McDowell, Fletcher W.
Montgomery, Lall G.
Morris, Jean W.
Nelson, Harold E.
Owens, Thomas R. (S)
Peacock, Robert C.
Pippenger, Wayne G.
Quick, William J.
Rivers, Glynn A.
Schoenhals, Charles E.
Smith, James S.
Speck, Carlson R.
Stibbins, Warren
Stout, Francis E.
Stump, Richard
Taylor, Donald R.
Taylor, James A.
Tharp, Donald W.
Tobe, Robert
Tomlin, Hugh M.
Venis, Kemper N.
Vlaskamp, Elaine
Voss, Gert
Walker, Jack M.
Young, Gerald S.

DUBOIS COUNTY
Barrow, John H.
Backer, Henry G.
Bretz, John M.
Scales, Alfred B.
Scales, Allen D.
Williams, Fielding P.

Jasper
Beaven, John B.
Blessinger, Paul J.
Gootee, Francis H.
Gootee, Thomas H.
Ploetner, Edward J.
Singer, Paul J.
Wagner, Arthur L.

ELKHART COUNTY
Bristol
Horswell, Richard G.
Neidballa, Edward G.

Elkhart
Arlook, Theodore D.
Atwood, William H.
Bender, Robert L.
Benson, James E.
Billings, Elmer R.
Boling, Richard
Bowdoin, George E.
Campbell, Patrick B.
Classen, Pete R. C.
Compton, Walter A.
Conklin, Raymond L.
Cormican, Herbert L.
Crandall, Lathan A.
Dovey, Edward G.
Echeverria, Rodolfo E.
Elliott, Thomas A.
Finfrock, James D.
Futterknecht, James O.
Gattman, George B.
Graber, Virgil R.
Hannah, Jack W.
Harris, Neil
Heminway, Norman
Hurley, James W.
Ivy, John H.
Jones, Robert B.
Keating, John U.
Kesim, Mufit
Kintner, Burton E.
Koehler, Elmer G.
Krause, Friedrich
Lundt, Milo O.
McArt, Bruce A.
Martin, Paul H.
Middleton, Ramona J.
Miller, Galen R.
Miller, Hugh A.
Mininger, Edward P.
Mishkin, Irving
Paff, William A.
Paine, George E.
Pancost, Vernon K.
Parshall, Dale B.
Patrick, Glenn B.
Rouen, Robert
Rupe, Lloyd O.
Schlosser, Herbert C.
Sobol, Z. W.
Spray, Page E.
Stubbins, William M.
Swank, Lucretia R.
Swihart, Homer R.
Wilson, Orley E.
Yoder, C. Richard

Goshen
Amstutz, Henry C.
Bigler, Frederick W.
Bosler, Howard A.
Bowser, Philip G.
Chandler, Leon H.
Hostetler, Carl M.
Kaufman, Lillie S.
Kennedy, Myron S.
Krabill, Willard S.
Martin, Floyd S.
Quilty, Thomas J.
Simmons, Lloyd H.
Troyer, Dana
Troyer, George W.
Turner, John P.
Wagner, David G.
Westfall, George S.
Young, Ralph H.

Millersburg
Massanari, Walter S.

Middlebury
Miller, Donald G.
Teters, Melvin S. (S)
Rheinheimer, Floyd L.

Nappanee
Fleetwood, R. A.
Kendall, Forest M.
Price, Douglas W.
Roose, Lisle W.

Syracuse
Craig, Robert A.
Fosbrink, Ephraim L.
Zimmerman, William H.

Wakarusa
Abel, Robert
Guttman, John B.

FAYETTE-FRANKLIN COUNTIES
Sanders, Bertram W.
Steinem, Joseph L.

FLOYD COUNTY
Brown, Kenneth H.
Edwards, William F.
Garner, William H., Jr.

Garner, William H., Sr.
Higgins, John R.
LaFollette, Donald R.
LaFollette, Robert E.
McCullough, James Y.
Paris, John M.
Sloan, Herbert P.
Sonne, Irvin S., Jr.
Streepey, Jefferson I.
Wolfe, Nelson

FOUNTAIN-WARREN COUNTIES

Crain, James W.
Fisher, John E.
Furr, Jack D.
Hoffman, Max N.
Humphrey, Edward M.
Maris, Lee J.
Nelson, Carl A.
Person, Theodore C.
Petrich, Peter R.
Quiambao, Hector S.
Raymundo, Vivencio F.
Rusk, Hubert M.
Smith, Byron J.
Stephens, Lowell R.
Suzuki, Tsutomu T.

FULTON COUNTY

Richardson, Charles L.
Stinson, Dean K.

GIBSON COUNTY

Carpentier, Harry F.
Dye, William E.
Folck, John K.
Geick, Raymond G.
Graves, Orville M.
Marchand, Edwin V.
McCarty, Virgil
McElroy, Robert S.
Peck, James F.
Petitjean, Harold G.
Weitzel, Roland E.
Wells, William R.

GRANT COUNTY

Alderfer, Henry H.
Ansbacher, Stefan (H)
Ayres, Wendell W.
Bailey, Douglas A.
Baskett, R. J.
Braunlin, Robert F.
Brown, Robert M.
Comeau, William J.
Davis, Joseph B.
Davis, Merrill S. (S)
Davis, Richard M.
Dunbar, Fred E.
Fisher, Henry
Ganz, Max
Garrison, L. J.
Grant, M. Arthur
Hover, Galen M.
Hummel, Russell M.
Jarrett, John C.
Koontz, William A.
Langrell, Harrison M., Jr.
Lavengood, Russell W.
Lonngren, Dudley H.
Love, V. Logan
McIlwain, Robert E.
Miller, H. Allison
Pattison, John D.
Pearcy, Marcene
Powell, J. Paxton
Price, Ambrose M.
Reid, James D.
Renbarger, Lester L.
Rhamy, Arthur P.
Rhamy, Donald E.
Rhorer, John G.
Richardson, Joseph H.
Rifner, Eugene S.
Roll, William A.
Schroeder, Robert W.
Simmons, Frederick H.
Skomp, Claud E.
Smith, Barton T.
Snowhite, Arthur B.
Taylor, Everett C.
Thompson, B. Jay
Walton, R. Lee
Warren, Carroll B.
Wojcik, Ladislas D.
Woodbury, John W.
Yale, Charles A.

GREENE COUNTY

Graf, J. A.
Mount, H. S.
Woner, John W.

HAMILTON COUNTY

Lloyd, Joe R.
Newby, Eugene

HANCOCK COUNTY

Kuhn, Robert W.

HARRISON-CRAWFORD COUNTIES

Blessinger, Louis H.
Brockman, Wilfred J.
Dillman, Carl E.
Dukes, David J.
Johnson, J. M.
Jordan, Richard A.
Lynch, Otis R.
Martin, Samuel W.
Seipel, Stanley

HENDRICKS COUNTY

Cohen, Irving
Gibbs, Joseph W.
Scamahorn, Malcolm O.
Scamahorn, Oscar T. (S)
Scudder, Arthur N.

HENRY COUNTY

Amos, Robert L.
Burnett, Arthur B.
Craig, Alexander F.
Fisher, John E.
Grant, Phyllis A.
Harrison, B. L.
Life, Homer L.
McElroy, James S.
Robertson, William S.
Scheetz, Marion R.
Smith, Mark E.
Stauffer, George E.
Steussy, Calvin N.
Vivian, Donald E.

HOWARD COUNTY

Greentown

Denton, Larkin D.
Shoup, Homer B. (S)

Kokomo

Alward, John H.
Artis, Myrle E.
Ault, Carl H.
Behn, Walter M., Jr.
Belding, Ray T.
Boughman, Joe D.
Bowers, Copeland C.
Bowers, Garvey B.
Bowers, John A.
Brown, Earl R., Jr.
Bruegge, Theodore J.
Cattell, Lee M.
Clarke, Elton R.
Conley, Thomas M.
Craig, Reuben
Crawford, Theodore R.
Earl, Max M.
Fields, Donald L.
Frazier, John L.
Fretz, Richard C.
Golper, Marvin N.
Good, Richard P.
Grothouse, Carl B.
Halfast, Richard W.
Hoyt, John M.
Hutto, William H.
McClure, Warren N.
Mendelson, Stanley M.
Michael, Robert L.
Murray, Ernest C.
Paris, Durwood W.
Phares, Robert W.
Prather, Philip E.
Rhorer, Herbert M. (S)
Rudicel, Max
Schwartz, Frederick C.
Smith, Gloster J.
Trimble, John G.
Wachob, Tom W., Jr.
Ware, John R.

HUNTINGTON COUNTY

Bennett, J. B.
Brubaker, Harold S.
Casey, Stanley M.
Clunie, William A.
Cooper, B. Trent
Cope, Stanton E.
Doermann, Paul E.
Eviston, John B.
James, Thomas, Jr.
Marks, Howard H.
Meiser, Robert D.
Mitman, Floyd B.
Omstead, Trevalyn W.
Van Campen, Warren M.
Wagner, Richard
Woods, Halden C.

JACKSON-JENNINGS COUNTIES

Bard, Frank B.
Berkshire, Shaffer
Calli, Louis
Easter, J. N.
Gillespie, Garland R.
Guthrie, William H.
Hingeley, John
Johnson, William A.
Scharbrough, William D.
Shields, Jack E.
Thayer, Benet W.

Seymour

Baxter, Harry R.
Black, Joe M.
Bobb, Kenneth E.
Bosch, Ralph
Day, W. Durbin
Graessle, Harold P.
Martin, Guy
Miller, Harold E.
Osterman, Louis H.
Templeton, Ian S.
Wiethoff, Clifford A.

JASPER-NEWTON COUNTIES

Brady, Kingdon
Parker, John C.
Schantz, Richard
Schoonveld, Arthur
Yegerlehner, Roscoe S.

Rensselaer

Beaver, Ernest R.
Greene, Robert W.
Jones, Edwin F.
O'Brien, Francis E.
Ockerman, Kenneth R.
Williams, Paul A.

JAY COUNTY

Cripe, William H.
Cronin, H. J.
Fitzpatrick, James S.
Gillum, Eugene M.
Keeling, Forrest E.
Lyon, Florence M.
Schenck, Ralph E.
Spahr, Donald E.
Steffy, Ralph M.
Tate, Elizabeth

JEFFERSON-SWITZERLAND COUNTIES

Alcorn, M. O., Jr.
Childs, Wallace E.
Fong, Theodore C. C.
Gambill, J. Randolph
Hamilton, Antha A.
Haney, William K.
Hare, Francis W., Jr.
Jolly, Lewis E.
Modisett, Jackson W.
Modisett, Marcella S.
Moore, Martha
Pratt, Ralph M., Jr.
Prenatt, Francis
Shuck, William A.
Turner, Anna Goss
Turner, Oscar A. (S)
Zink, Robert O.

JOHNSON COUNTY

Barnes, Helen Beall
Bullers, Robert C.
Chambers, Pauline D.
Chappel, Alfred T.
Foster, Robert H. K.
Jones, Charles A.
Link, Charles W., Jr.
Machledt, John H.
Mock, Harry E., Jr.
Portteus, Walter L.
Province, Oran A.
Province, William D.
Records, Arthur W.
Snodgrass, Robert E.
Walters, Jack L.
Waymire, William M.

KNOX COUNTY

Bicknell

Byrne, Robert J.
Shanklin, Jack L.
Wilson, Guy H.

Oaktown

Springstun, George H.

Vincennes

Anderson, John B.
Anderson, Richard M.

Arbogast, Paul B.
Barrett, Thomas L.
Bartlett, Donald T.
Black, Boyd K.
Cantwell, Ed R.
Chattin, Herbert O.
Coffel, Melvin H.
Corsentino, Bart E.
Edwards, Edward T., Jr.
Ewing, Nathaniel D.
Hendrix, Charles E.
Kline, Charles D.
McCormick, Hubert D. (S)
McMahan, Virgil C.
Nichols, Robert J.
Schulze, William
Shaffer, Kenneth L.
Smith, Ralph O.
Smith, S. Joseph
Spencer, Frederic
Stein, Richard H.
Stewart, J. Frank W.
Sullenger, Adron A.
Vaughn, Walter R.
von der Lieth, William C.
Welch, Norbert M.

KOSCIUSKO COUNTY

Pierson, Pearl H.
Urschel, Dan L.
Wilson, Wymond B.

Warsaw

Arford, John E.
Cron, William J.
Dormire, Robert D.
Hashemi, Hossein
Haymond, George
Hillery, John
Hursey, V. G.
Schlemmer, George H.
Thomas, Everett W.

LAGRANGE COUNTY

Benedict, Charles D.
Flannigan, Harley F.
Lehman, Kenneth M.
Miller, Jerry A.
Studebaker, Lloyd R.
Williams, John H.
Yunker, Philip E.

LAKE COUNTY

Cedar Lake

Heckaman, Edward L.
King, Robert W.
Miller, Donald C.
Misch, William

Crown Point

Becker, Philip H.
Bernoske, Daniel G.
Birdzell, John P.
Carroll, Mary D.
Dhein, Donald T.
Doherty, Raymond J.
DuSold, Donald D.
Gray, Daniel E.
Gutierrez, Peter E.
Horst, William N.
Monroe, F. Bruce
Russo, Andrew E.
Steele, Everett B.
Troutwine, William R.

Dyer

Theobald, Sterling

East Chicago

Balingit, B. L.
Barron, Elmer A.
Beilks, C. A.
Bonaventura, Angelo P.
Boys, Fay F.
Brauer, Abraham A.
Braun, Benjamin D.
Broomes, Edward L. C.
Bryant, Edward G.
Claybourn, Norman L.
Dainko, Alfred J.
Fedor, Thomas
Fleischer, Jacob C.
Gardiner, H. Glenn
Geronimo, Manuel M.
Geronimo, Rita R. V.
Grosso, William G.
Harper, James W.
Hayes, Jesse D.
Hernandez, I. C.
Irish, Wilbur J.
Komoroske, John E.
Kopanko, Bernard F.
McGuire, Desmond F. (S)
Marks, Ora L.
Marquinez, Adoracin A.
Milan, Shisacki D.
Nicosia, John B.
Perdomo, Octavio J.
Ramos, John
Reitman, Paul H.
Serna, Carlos A.
Shapiro, Joseph
Shapiro, Seymour W.
Shulruff, Harry I.
Teegarden, Joseph A., Jr.
Teplinsky, Louis L.
Trepagnier, Francis B.
Walker, Adolph P.

Gary

Abramson, Allan L.
Alfano, Paul A.
Almquist, Carl O.
Alvarez, Paul
Ambrozaitis, Kazys
Amico, Pasquale J.
Armalavage, Leon J.
Alienza, R. T.
Barton, Reginald R.
Behn, Walter M.
Bendler, Carl H.
Bergal, Milton B.
Bernard, Marvin R.
Bills, R. James
Bills, Robert N.
Bisgyer, Jay L.
Borak, Walter J.
Bornstein, Herschel
Brady, Samuel G.
Brandman, Harry
Brincko, John
Bringas, Irineo B.
Brown, David B.
Brown, Leo R.
Bullard, Mattie J.
Burcham, James B.
Cahué, Antonio R.
Carberry, George A.
Carey, J. Albert
Carmody, Raymond F.
Chube, David D.
Cooper, Leo K.
Corrao, Gaetano
Daniel, Robert A.
Darling, Dorothy R.
Davis, Neal
De Bois, Elon
Dian, August J.
Dierolf, Edward J.
Donchess, Joseph C.
Dosado, Elpidio B.
Duncan, John S.
English, Hubert M.
Espy, Theodore R.
Fadell, Matthew J.
Fadul, Armand
Franklin, Philip
Brown, Jesse
Galante, Vincent J.
Gilles, Pierre
Glover, William J.
Goldberg, Harold B.
Golding, Robert F.
Goldstone, Adolph
Goldstone, Arthur
Goldstone, Joseph
Goldstone, Robert J.
Goldstone, Sidney R.
Grant, Benjamin F.
Gregoline, Amadeo F.
Hadey, James H.
Hedrick, James T.
Hodurski, Zigfield
Hoit, Leonard
Jahns, Albin A.
Johnson, Arnold L.
Johnson, Lonnie B.
Kaltenthaler, Albert
Kendrick, Frank J.
Khaton, Odessa M.
Kobrin, Meyer W.
Kolettis, John G.
Kopcha, Joseph E
Korn, Jerome M.
Lazo, Vicente R.
Lebioda, Henry S.
Lewis, George N.
Lipschutz, Harold
Lipsey, Alfred J.
Loh, Hwei Ya (Chang)
Loh, Wei-Ping
Lorenty, Thaddeus B.
Lovell, Martin H.
Lutz, Georgianna
Lytwakiwsky, Anatol
Majsterek, Stanley L.
Manalo, Francisco S.
Marshall, Millard R.
Mather, J. Winford
May, Richard M.
Milos, Robert J.
Minczewski, Richard C.
Mitchell, Georgia B.
Molengraft, Cornelius J.
Moore, Edwin G.
Morris, Hyman R.
Moswin, Jack A.
Mott, William H.
Nelson, Walfred A.
Oberlander, Seymour
Olson, Leslie D.
Ornelas, Joseph P.
Parratt, Louis W.
Penn, Robert A.
Poracky, Bernard F.
Pruitt, J. Edward
Radigan, Leo R.
Ramos, Alfonso
Reynolds, James S.
Richter, Samuel
Riordan, John F.
Robinson, Walter K.
Rosenbloom, Philip J.
Ross, David E., Jr
Roth, Belvin I.
Roth, Leo
Rubin, Simon S.
Ryan, Hubert J.
Sala, Joseph J.
Sala, Walter R.
Schulz, Kurt J.
Scully, John T.
Shellhouse, Michael
Shevick, Alexander
Slama, George F.
Slama, John T.
Spellman, Frank W.
Stimson, Harry R.
Thomas, Daniel D.
Thomas, Gerald J.
Tsatsos, George C.
Turgi, Robert W.
Valencia, M. Monica
Verplank, Grover L. (S)
Voorhies, McKinley
Vye, J. P.
Walters, Eleanor
Washington, G. Kenneth
Weiskopf, Henry S.
Williams, Alexander S.
Williams, Edwin D.
Williams, Fred R.
Yast, Charles J.
Yocum, Paul S., Sr.
Yocum, Paul S., Jr.
Yocum, William S.
Young, George M.
Young, Robert L.
Zucker, Edward

Griffith

Lundeberg, Ralph A.
Purcell, Richard J.
Siekierski, Joseph M.

Hammond

Allegretti, Michael L.
Balaguer, Carmen V.
Beconovich, Robert
Bombar, Leslie E.
Costello, Albert J.
Cotter, Edward R.
Davis, Thomas N. III
Eggers, Henry W.
Egnatz, Nicholas
Eugenides, Tatiana
Fischer, Burnell
Fitzpatrick, William J.
Friedman, Isadore E.
Gevirtz, Milton B.
Hickman, A. Lee
Howard, William Harry
Husted, Robert G.
Hyndman, Lloyd G.
Jones, Eli S.
Kenney, Francis D.
Kolanko, Leon A.
Koransky, David S.
Kuhn, Arthur J.
Kuhn, Hedwig S.
LaFollette, Forrest R.
Lautz, Herbert A.
Long, Keith J.
McVey, Clarence A.
Mansueto, Mario D.
Marcus, Emanuel
Marks, Salvo P.
Marshall, Wilber J.
Mason, Richard L.
Mintz, Alfred M.
Modjeski, Joseph R.
Montes, Herminio Y.
Neal, Leonard W.
Palmer, Barron M. F.
Panares, Solomon V.

Peiffer, Geraldine M.
Pilot, Jean
Premuda, Franklin F.
Ramker, Daniel T.
Rasch, George C., Jr.
Rawlins, Carolyn M.
Remich, Antone C.
Rendel, Donald T.
Rhind, Alexander W.
Rosenthal, Carl
Rosevear, Henry J.
Row, Perrie Q.
Rubright, Robert L.
Sargent, Wallace B.
Schlesinger, Daniel J.
Schulfer, Richard J.
Schwartz, Mary M.
Smith, Jerald E.
Smitley, Roger P.
Solis, Roger V.
Sroka, Alexander G.
Stasick, Murray
Stern, Samuel L.
Tilka, Edward C.
Trachtenberg, Lee
Weissman, Charles G.
White, Gilbert H., Jr.
Wong, Samuel N.

Highland

Bakos, Edward R.
Santiago, Iluminada
Sroka, Stanley J.

Hobart

Carter, John O.
Faulkner, Donald J.
Kellar, Philip E.
Krsek, Archie J.
Markle, Joseph G.
Parker, Harry C. (S)
Pike, Warren H.
Reed, John
Weiss, John T.

Lowell

Mirro, John A.
Smith, Robert D.
Templin, David B.

Munster

Arbeiter, Herbert L.
Arrowsmith, James L.
Brenner, Howard B.
Chael, Thomas C.
Espino, Jose C.
Fox, Jack M.
Lanman, John U.
Larrabee, James F.
Madlang, Rodolfo M.
Mason, John C.
McLean, James S.
Navarre, Vincent J.
Paul, Eudell G.
Portney, Fred R.
Rudolph, Franklin G.
Santare, Vincent J.
Schwartz, Jack
Snyder, Jerome A.
Stevens, Edwin W.
Sweany, Stanford K.
Thomas, Thomas R.
Westhaysen, Peter V.
Wooden, Thomas F.

Portage

Carlson, Milton R.
Crise, John R.
Hoham, Fred D.
Kilmer, Warren L.
Lands, Robert M.
Noonan, Leo C.

Whiting

Angel, Virgil E.
Becker, Samuel W.
Ferry, John L.
Frankowski, Clementine E.
Greisen, Jack G.
Gustaitis, John W.
Kudele, Louis T.
Reed, Ronald
Rudser, Donald H.
Silvian, Harry A.
Smith, Theodore J.
Stecy, Peter
Steen, Lowell H.
Troy, Jack M.
Weinberg, Benjamin A.

Out of State

Angeles, Uldarico A.
Bradley, Charles F.
Elliott, Ralph A.
Tyrrell, Thomas C.

LA PORTE COUNTY

Benz, Owen F.
Carter, William D.
Rohrer, Bryce B.
Moosey, Louis

La Porte

Backer, George P.
Backer, Mary B.
Carpentier, James R.
Carter, Fred S.
Cartwright, Jack D.
Datzman, Basil J.
Durham, Lowell J.
Elshout, Clem H.
Erwin, W. Robert
Feinn, Harry S.
Fischer, Carlton N.
Kelsey, Robert M., Jr.
Kelsey, Robert M., Sr.
Kepler, Robert W.
Kistler, James J.
Larson, Goyt O.
Mead, Frank E.
Mueller, Edwin C.
Muhleman, Charles E.
Philbrook, Seth S.
Predd, Adolph C.
Richter, John C.
Tabaka, Francis B.
Von Asch, George
Wolf, William E.

Michigan City

Armstrong, Thomas D.
Berkson, Myron E.
Brooks, H. L.
Cleveland, John B.
Fargher, Francis M.
Frost, Robert J.
Gardner, Melvin D.
Gardner, Russell A.
Gilmore, Robert W.
Gilmore, Russell A. (S)
Grotts, B. F.
Hillenbrand, Charles
Kemp, John T.
Kerr, Charlotte H.
Kerr, John E.
Kerrigan, John F.
Liddell, Charles K.
Marske, Robert L.
McGue, Frank J.
Milne, Walter S.
O'Brien, Raymond J.
Phillips, Johns H.
Plank, C. Robert
Stumer, Myer
Tunnell, Harry D.
Walters, William H.
Zalac, Donald A.
Weinstock, Adolph

Westville

Constan, Evan
Dieter, William J.
Hetman, Mitchell J.
Matthew, John R.
Meyer, Hans
Oster, Jack H.
Salzburg, Herbert E.
Sennett, Cecil M. (S)
Wygant, Marion D.

LAWRENCE COUNTY

Allen, L. Howard
Austin, Richard P.
Benham, Lawrence E.
Bridwell, Edgar
Dusard, Joseph C.
Emery, Charles B.
Hamilton, James R.
Hammel, Howard T.
Kasting, Gerald
Oswalt, James T.
Scherschel, John P.

MADISON COUNTY

Austin, M. A.
Baughn, William L.
Bixler, Donald P.
Hensler, Benton M.
Jarrett, Paul E.
Jones, Horace E.
Kopp, Otis A.
Lamey, James L.
Lamey, Paul T.
Litzenberger, Sam W.
McClelland, Harry N.
Neale, Alfred E.
Nesbit, Leonard L.
Pierce, Fredrick H.
Polhemus, Warren C.
Reynolds, Ralph E.
Starks, William O.
Swan, Richard C.
Webb, Harry D.
Wilder, Gordon B.
Williams, Robert H.

Elwood

Buechler, William F.
Hanson, Martin F.
Laudeman, W. A.
Ploughe, Ralph R.

Frankton

Bishop, Harry A.

MARION COUNTY

Anderson, Wendell C.
Arbogast, John L.
Baird, Melvin S.
Bakemeier, Otto H.
Bakemeier, Robert E.
Balch, James F.
Batman, Gordon W.
Battersby, J. Stanley
Bauer, Thomas B.
Beck, Evart M.
Becker, Harry G.
Beeler, John W.
Bibler, Lester D.
Booher, Norman R.
Booher, Olga Bonke
Boyer, Floyd A.
Brady, Thomas A.
Brayton, Lee
Brickley, Harry D.
Brickley, Richard A.
Brodie, Donald W.
Brooks, Fred R., Jr.
Brown, Archie E.
Brown, Frances T.
Brown, Thomas C.
Browning, James S.
Burdette, Harold F.
Burghard, Rolla D.
Byar, E. W.
Call, Herbert F.
Campbell, Robert L.
Carson, Wayne
Chernish, Stanley M.
Clark, Cecil P.
Clark, George A.
Clark, Lawson J.
Clevinger, William G.
Close, W. Donald
Conway, Chester C.
Conway, Glenn
Countryman, Frank W.
Craft, Kenneth L. (S)
Crawford, John A.
Culbertson, Clyde G.
Cullen, Paul K.
Culloden, William G.
Cure, Charles W.
Cuthbert, Marvin P.
Davis, Sam J.
Deal, Eleanor H.
Dearmin, Robert M.
DeArmond, Murray
Denny, James W.
Dill, Myron K.
Donato, Albert M.
Doughty, Samuel R., Jr.
Everly, Ralph V.
Fausset, C. Basil
Ferry, Francis A.
Finneran, Joseph C.
Flick, John J.
Flora, Joseph O.
Fortuna, Frank W.
Fosgate, Harold L.
Foster, Lee N.
Freed, Carl A.
Gaddy, Euclid T.
Garceau, George J.
Gardiner, Sprague H.
George, Charles L.
Gillespie, Charles F.
Ginsberg, Stewart T.
Gormley, Joseph J.
Gosman, James H.
Grayson, Ted L.
Greist, John H.
Grisell, Ted L.
Gruber, Charles M.
Habegger, Elmer D.
Hadley, David
Hagan, Robert F.
Haggard, Edmund B.
Hampshire, Donald R.
Hann, Eldon C.
Hansell, Robert M.
Harger, Robert W.
Harris, Carl B.
Harvey, Verne K., Sr.
Hatfield, Nicholas W.
Haymond, Joseph L.
Healey, Robert J.

Heimburger, Robert F.
Hendricks, John W.
Hepburn, C. K.
Hickam, John B.
Hicks, Wilbur P.
Howell, Robert D.
Hoyt, Lester H.
Hoyt, Millard L.
Huber, Carl P.
Huddle, John R.
Irwin, Glenn W., Jr.
Iske, Paul G.
Jenkins, Robert E.
Jewett, Joe H.
Jones, David E.
Jones, Francis P.
Jowitt, Richard H.
Kahn, Howard L.
Keiser, Venice D.
Ketcham, Jane M. (S)
Kim, Young D.
Kime, Edwin N. (S)
King, Harold
Kinzel, Robert J. W.
Kissel, Wesley A.
Klatte, Eugene C.
Kneidel, John H.
Kohlstaedt, Kenneth G.
LaDine, Clarence B.
Lamb, Emmett B.
Lane, Charlotte E.
Lasich, Anthony R.
Leffel, James M.
Levi, Leon
Lewis, Paul S.
Lichtenberg, Melvin
Lingeman, Roger E.
Loughlin, Lawrence L.
Love, George N.
Lukemeyer, George T.
Lybrook, William B.
McGrath, Michael F.
McIntyre, James M.
McKinley, A. David
McQuiston, Ralph J.
Mackey, John E.
Manalan, Maurice M.
Manders, Karl L.
Manion, Marlow W.
Manning, K. Randolph
Martz, Bill L.
Martz, Carl D.
Marvel, Robert J.
Matthew, W. Burleigh
Matthews, Bernard J.
Megenhardt, Dennis S.
Melin, John R.
Mentendiek, Maurice H.
Mericle, Earl W.
Merrell, Paul
Mershon, Jack B.
Mertz, John H. O.
Michael, Isaac E.
Middleton, Harvey N.
Miller, Jerry R.
Moenning, John E.
Moenning, W. P.
Morchan, Samuel
Morgan, Margaret E.
Morton, Joseph L.
Muller, Victor H.
Nourse, Myron H.
Nafe, Cleon
O'Brian, Earl J.
Ochsner, Harold C.
Offutt, Andrew C.
Olvey, Ottis N.
Otten, Claude F.
Owens, Tracy C.
Pandolfo, Harry
Paulissen, George T.
Peck, Franklin B., Jr.
Pfaff, Dudley A.
Pierce, Emmett, Jr.
Pryor, Richard C.
Rabb, Frank M.
Ramsey, Frank B.
Reed, Philip B.
Reilly, Eva F.
Rice, Raymond M.
Ritchey, James O. (S)
Robb, John A.
Rohn, Robert J.
Romberger, Floyd T., Jr.
Ross, Alexander T.
Roth, Bertram S.
Ruddell, K. R.
Rudesill, Cecil L. (S)
Russel, John R.
Ryan, Glen V.
Salb, Max C.
Sanders, Harry M.
Schlaegel, Theodore F., Jr.
Schlegel, Donald M.
Schuchman, Gabriel
Schuster, Dwight W.
Sedam, Herbert L.
Sellner, George W.
Shafer, Marion R.
Sherster, Harry
Shullenberger, Wendell A.
Shumacker, Harris B., Jr.
Sicks, Okla W.
Sigmond, Harvey W.
Simmons, James E.
Smith, Roy Lee
Smith, William B.
Southworth, John W.
Spahr, John F., Jr.
Spivey, Russell J.
Stanley, John S.
Stephens, Donald E.
Stoelting, Vergil K.
Storey, Joseph L.
Talbott, Dan E.
Tanner, Henry S.
Taylor, Clifford C.
Test, Charles E.
Thomas, Fred A.
Thomas, Lowell I.
Thompson, John V.
Thornton, Harold C.
Torrella, Jose A.
Trusler, Harold M.
Tyner, Harlan H.
Vollrath, Victor J.
Wainscott, Clinton S.
Walther, Joseph E.
Warvel, John H.
Wilkens, Irvin W.
Williams, Clifford L.
Wilson, Fred M.
Wise, William R.
Wishard, William N., Jr.
Witham, Robert L.
Wood, Donald E.
Worley, Joseph P.
Yacko, Michael L.
Young, John M.
Zerfas, L. G.

Out of State

Brown, Thomas C.
Fosgate, Harold L.
Hurt, LaVerne B.
Myers, Roy V. (S)
Nelson, John W.
Paynter, Morris B.

MARSHALL COUNTY

Argos

Hampton, James N.

Bourbon

Connell, Vactor O.

Bremen

Bowen, Otis R.
Burket, Cecil R.
Cripe, Earl P.
Schreiner, John E.
Stine, Marshall E.

Culver

Baker, Milan D.
Norris, Ernest B.

Plymouth

Connell, Paul S.
Coursey, James O.
France, Lloyd C.
Kubley, James D.
Peterson, Ronald L.
Reed, Robert G., Jr.
Rimel, James F.
Robertson, James S.
Vore, Louring W.

MIAMI COUNTY

Barnett, Ralph E.
Ferrara, Donald W.
Ferrara, Samuel J.
Herd, Cloyn R.
Hill, Lloyd L.
Malott, Fred R.

MONTGOMERY COUNTY

Alexander, Stephen J.
Blix, Fred M.
Burks, Jess E.
Byrne, L. E.
Cornell, Robert A.
Daugherty, Fred N.
Davis, William H.
Dodds, Wemple
Eggers, Richard
Fisher, Frank
Haller, Thomas C.
Humphreys, John W.
Kindell, Hurschell D.
Kinnaman, H. A.
Kirtley, James M.
Lingeman, Byron N.
Millis, Samuel C.
Otten, Ralph E.
Parker, Carl B.
Peacock, Norman F.
Pierson, Robert H.
Priebe, Fred H.
Richards, Edgar E.
Shannon, Wesley E.
Sharp, John Leon
Thompson, Claude N.
Viray, Victoriano G.
Wallace, Hawthorne C.

MORGAN COUNTY

Bivin, James H.

NOBLE COUNTY

Messer, Frank W.

ORANGE COUNTY

Hodgin, Philip T.
Keseric, N. E.
Schoolfield, William E.
Sugarman, Benjamin E.

Paoli

Clark, Ivan A.
Manship, Stanley S.
McCalla, Charles X.
Spears, John K.

OWEN-MONROE COUNTIES

Holland, Philip T.
Hrisomalos, Frank N.
Manifold, Harold M.
Middleton, T. O.
Rogers, Otto F.
Stangle, W. J.
Topolgus, James N.

PARKE-VERMILLION COUNTIES

Bloomer, Richard S.
Britton, Welbon D.
De Renne, William L.
Dowell, Emil H.
Evans, Frederick J.
Fell, Robert M.
Goodrum, William R.
Harstad, Casper
Herzberg, Milton
Kempf, Gerald F.
Lauer, Dorothy B.
Merrell, B. M.
Pace, J. V.

PERRY COUNTY

Bush, Hargis R.
Dukes, David A.
Gilbert, Robert G.
Herr, John W.
James, John M.
Kemker, Bernard P.
Lohoff, Lewis C.
Neifert, Noel L.
Ress, Gene E.
Smith, Fred, Jr.

PORTER COUNTY

Chesterton

Cohen, H. L.
Griffin, Joseph P.
Hall, Thomas C.
Harless, Clarence M.
Read, John E.
Robertson, William C.

Valparaiso

Brown, James C.
Covey, Thomas J.
Davis, Carl M.
DeGrazia, Eugene J.
Dittmer, Jack E.
Dittmer, Thomas L.
Eades, Ralph C.
Griffin, Charles G.
Koenig, Robert L.
Lee, Robert Y.
Makovsky, Theodore
O'Neill, Martin
Sacks, Leonard Z.
Scheimann, Lois
Schmidt, Richard H.
Stoltz, Robert M.
Vietzke, Paul C. F.

Wheeler

Gordon, Joseph L.

POSEY COUNTY

Boren, Paul R.
Boyle, Carroll L.
Challman, William B.

Crist, John R.
Ropp, Harold E.
Woods, Arba L. (S)

PULASKI COUNTY
Thompson, William R.

PUTNAM COUNTY
Dester, Herbert E.
Dettloff, Frederick R.
Ellett, John, Jr.
Johnson, James B.
Nichols, Anne Sackett
Schauwecker, Cleon M.
Smith, A. Wilson
Steele, Dick J.
Tennis, George T.
Tipton, William R.
Veach, Lester W.
Veach, Richard L.
Wiseman, V. Earle

RANDOLPH COUNTY
Farmland
Nixon, Byron
White, Harvey E.

Lynn
Harmon, Wayne
Jordan, Leo E.

Modoc
Shallenberger, Henry R.

Ridgeville
Potter, Richard M.

Union City
Birum, Patricia J.
McClure, Morris E.
Phipps, Leland K.
Wagoner, B. D.

Winchester
Dininger, William S.
Koch, Howard W.
Painter, Lowell W.
Slick, Crystal R.
Sparks, Paul W.

RIPLEY COUNTY
Hisrich, Lloyd W.
Lippoldt, Charles L.
Warn, William J.

RUSH COUNTY
Atkins, C. C.
Corpe, Kenneth
Dean, Donald
Ellis, Davis
Green, Frank
McKee, Harry G.
Norris, Marvin G.
Nutter, W. H.
Sheets, Charles E.
Smith, Stephen
Worth, Willard

ST. JOSEPH COUNTY
Elkhart
Zeitler, Philip S.

Mishawaka
Christophel, Verna A.
Farner, James E.
Ganser, Richard A.
Goethals, Charles J.
Mahank, Camiel C.
Martin, Charles F.
Sirlin, Edward M.
Spalding, Wendell L.
Templeton, Ames R.
Walerko, Frank
Walters, Charles E.
Whitlock, Francis C.
Whitlock, Merle E.
Wurster, Herbert C.
Zimmer, Henry J.

New Carlisle
Luzadder, John E.

Osceola
Warrick, Homer L.

Rolling Prairie
Helman, Harry W. (S)

South Bend
Backs, Alton J.
Bechtold, Samuel E.
Bennett, Jene R.
Berke, Robert D.
Biasini, Benedict A.
Bickel, David A.
Bixler, Louis C.
Bodnar, Leslie M.
Booth, Franklin M.
Buchanan, Wallace D.
Butts, Milton A.
Cassady, James V.
Cassady, John R.
Clark, William H.
Colosey, Frederick J.
Cook, Gordon C.
Culbertson, Carl S.
Davis, Edward A.
Denham, Robert H.
Devoe, Kenneth
Dietl, Ernest L.
Dodd, Robert D.
Dolezal, Bernard J.
Donnelly, Everett P.
Dunlap, D. Logan
Eades, R. Charles
Ebin, Judah L.
Edwards, Bernard E.
Egan, Sherman L.
English, John P.
Ericksen, Lester G.
Feferman, Martin E.
Filipek, Walter J.
Firestein, Ben Z.
Frank, Lyall L.
Frash, DeVon W.
Frey, William B.
Friedman, Morris S.
Frith, Louis G.
Gates, George E.
Green, George F.
Green, Norval E.
Grillo, Donald
Grove, James H.
Hamilton, Charles O.
Helmer, John F.
Hildebrand, John O., Jr.
Hill, Theodore A.
Holdeman, Richard W.
Houser, D. Stanley
How, Louis E.
Hyde, Carroll C.
Kamm, Bernard A.
Lamb, J. Leonard
Lane, William H.
Lester, Vern L.
Levatin, Bernard I.
Lionberger, John R.
Liss, Emanuel C.
Lockhart, Philip B.
McDonald, Ralph M.
Metcalfe, Grant E.
Mott, Cassell A.
Mueller, Hilbert M.
Murphy, Eugene C.
Murphy, Josephine F.
Nelson, Raymond E.
Olson, Donald T.
Olson, Kenneth L.
Oren, William F.
Orr, W. Robert
Parsons, Robert L.
Phelps, Stephen R.
Pyle, Harold D.
Rasmussen, Ruth F.
Rigley, Edward L.
Rodin, Herman H.
Rosenheimer, George M.
Rubens, Eli
Rudolph, Carl J.
Sanderson, Robert B.
Sandock, Louis F.
Sandoz, Harry H.
Schaphorst, Richard A.
Schiller, Herbert A.
Scott, Frank M.
Selby, Keith E.
Sensenich, Roscoe L. (H)
Sharp, Merle C.
Shriner, Richard L.
Sisson, Norvel D.
Skillern, Scott D.
Staunton, Henry A.
Stiver, Daniel D.
Stogdill, William J.
Thompson, John M.
Thompson, Robert A.
Thornton, Maurice J.
Tirman, Wallace S.
White, Donald G.
Wilhelm, Agatha M.
Wilson, James M.
Wixted, John F.
Wixted, Julia L.
Zeiger, Irvin L.

Wyatt
Cline, Kenneth L.

SCOTT COUNTY
Bogardus, Carl R.
McClain, Marvin L.
Sabens, James A.

SHELBY COUNTY
Davis, John A.
Inlow, Herbert H.
Paz, Luis
Scott, V. Brown
Spindler, Robert D.
Tindall, William R.
Whitcomb, Roger F.

STARKE COUNTY
DeNaut, James F.
Henry, Howard J.
Ingwell, Guy B.
Leinbach, Earl R.
Llamas, Dominador F.
McClure, Clark

STEUBEN COUNTY
Alford, James A.
Artz, Richard W.
Barton, Robert
Cameron, Don F.
Cameron, Mary H.
Kissinger, Knight L.
Mason, Donald G.
McCormack, Lloyd L.
Mittleman, Edwin J.
Rausch, Norman W.
Schrepferman, Wayne

SULLIVAN COUNTY
Bedwell, Marion H.
Bethea, Robert O.
Brown, John S.
Crowder, James H.
Daugherty, William L.
Eskew, Kenneth W.
Scott, Irvin H.

TIPPECANOE COUNTY
Ade, Charles H.
Ade, Mary Keller
Babb, Forrest J.
Baker, John R.
Balkema, Catherine M.
Bayley, William E.
Bolin, Robert C.
Buhrmester, Harry C., Jr.
Burns, John T.
Bush, Jack A.
Calvert, Raymond R.
Canganelli, Vincent G.
Carpenter, James B.
Cole, Ira
Coyner, Alfred B. (S)
Davis, Howard B.
Derhammer, George L.
Deur, Julius J.
Donahue, George R.
Dubois, Ramon B.
Eaton, Marion J.
Elliott, Paul W.
Engeler, James E.
Fields, Donald C.
Flack, Russell A.
Frasch, Mahlon G.
Frey, Harley B.
Gery, Richard E.
Gish, Howard M.
Gripe, Richard P.
Haas, Charles F.
Hanneman, Robert E.
Harter, Eli B.
Harvey, Bennett B.
Henderson, Robert N.
Holladay, Lloyd J.
Horswell, Richard R.
Hughes, Richard R.
Hull, James E.
Hunsberger, Walter G.
Johnson, Herbert S.
Johnson, Lowell R.
Jones, David
Karberg, Richard J.
Klepinger, Harry E.
Kohne, Robert W.
Kresler, Leon E.
Landis, Charles B.
Lind, Jaap J.
McAdams, Hugh B.
McAdams, Robert
McFadden, James M.
McKinney, Daniel H.
Marsh, George
Marvel, Howard R.
Mather, Charles R.
Mather, Robert L.
Miller, Albert J.
Miller, Roland E.
Mount, William M.
Neumann, Kenneth O.
Onorato, Joseph J.

Peyton, Frank W.
Ratcliff, Frank W.
Rothrock, Philip W.
Schilling, R. J.
Sholty, William M.
Smith, Lowell C.
Stahl, Edward T.
Stansell, Gilbert B.
Steele, Hugh H.
Strayer, Joseph W.
Stuntz, Edgar C.
Trout, Carl J.
Underwood, George M.
Van Buskirk, Edmund L.
Van Den Bosch, Wallace R.
Vermilya, Robert W.
Weaver, Richard J.
Webster, Paul L.
Weller, Wendell A.
Williams, Robert E.
Williams, Russell S.
Wong, Norman F.

West Lafayette

Bahler, Dean R.
Carroll, Bertha Rose
Combs, Loyal W.
Rommel, Clarence H.
Wilms, John H.

TIPTON COUNTY

Burkhardt, Boyd A.
Carter, Jean V.
Compton, George L.
Ericson, Harold L.
Gossard, Meredith B.
Haller, Robert L.
Kincaid, Raymond K.
Kurtz, William A.
Stouder, Albert E.
Tranter, William F.

VANDERBURGH COUNTY

Evansville

Adler, Ray N.
Anderson, Milton H.
Barnhart, Willard T.
Beisel, Larry H.
Bennett, Abner P.
Boyd, Stella N.
Brown, George W.
Bryan, Stanton L.
Burress, Clyde R.
Brown, Robt. L.
Carlson, Ralph F.
Clouse, Paul A.
Cockrum, William M.
Combs, Herman T.
Cooper, Waller W.
Corcoran, P. J. V.
Crawford, James H.
Crimm, Paul D.
Crudden, Charles H.
Cullnane, Chris W.
Cymbala, Bohdan
Daves, W. Lawrence
Davis, Max D.
Denzer, William O.
Dieckman, Herbert S.
Dodd, Roberts K.
Downer, Luther H.
Drake, Dale W.
Durkee, Melvin S.
Dutchman, William R.
Dycus, Walter A.
Dyer, Wallace K.
Dunham, H. H.
Eisterhold, John A.
Engel, Edgar L.
Faith, Ira L.
Faul, Henry J.
Fickas, Dallas
Fisher, William C.
Garst, Garland R.
Gaul, L. Edward
Geller, Samuel
Giorgio, Douglas J.
Gourieux, E. De Verre
Griep, Arthur H.
Hammond, R. Case
Hartley, Clarence A., Jr.
Hendershot, Eugene L.
Hobbs, Arthur A.
Hoopes, Jane M.
Hoover, J. Guy
Hovda, Richard B.
Hyatt, Gilbert T.
Johnson, Harold V.
Johnson, Stephen L.
Kiechle, Frederich L.
Kincaid, Robert S.
Laubscher, Clarence
Lawrence, Joseph C.
Leibundguth, Henry
Leich, Charles F.
Lynch, Harold D.
McDonald, Joseph D.
McKeon, Edward C.
MacKenzie, Pierce
Maxson, Roy V.
Miller, LaVerne B.
Miller, Milton J.
Mino, Robert A.
Moehlenkamp, Charles E.
Moulton, Lillian G.
Murphy, Edward U.
Newsome, C. K.
Nicholson, Raymond W.
Niedermayer, Alfred J.
Nonte, Leo R.
Oswald, Robert H.
Pastor, Julius W.
Pavlick, Theodore J.
Pemberton, Jack J.
Porro, Francis W.
Pugh, Willis L.
Ratcliffe, Albert W.
Rietman, H. Jerome
Rittlemeyer, Louis F., Jr.
Rosenblatt, Bernard B.
Royster, Robert A.
Rudolph, Kenneth J.
Rusche, Henry J.
Russell, Richard H.
Schimmelpfennig, Robert W.
Schirmer, Robert H.
Schneider, Charles P.
Schriefer, Victor V.
Slaughter, Howard C.
Snively, William D., Jr.
Springstun, Walter R.
Steele, Paul W.
Sterne, John H.
Tilden, Margaret H.
Tuholski, James M.
Tweedall, Daniel C.
Viehe, Robert W. (S)
Visher, John W. (S)
Walter, Robert F.
Weiss, Henry G.
Wilhelmus, Gilbert M.
Williamson, G. W.
Willis, Charles F.
Wilson, David
Wilson, Ralph
Young, C. Curtis
Zeier, Francis G.
Zwickel, Ralph E.

Out of State

McClary, Charles W.

VIGO COUNTY

Allen, Orris T. (S)
Anderson, Walter C.
Ault, Roy J.
Bannon, Wm. G.
Benages, Anthony G.
Blum, Leon L.
Bopp, Henry W., Jr.
Bopp, James
Boyd, H. Clark
Bronson, Paul J.
Brown, Robert R.
CaJacob, Melville E.
Caldwell, Milton V.
Cavins, Alexander W.
Combs, Stuart R.
Conforti, Victor P.
Conklin, James O.
Connerley, Marion L.
Denny, E. Rankin
Drummy, William W.
Dyer, George W.
Eversman, Geo., Jr.
Gerrish, Donald A.
Gillotte, Joseph P.
Goodman, Hubert T.
Gossom, Donn R.
Harkness, Robert G.
Haslem, Ezra R.
Haslem, John R.
Hogan, Thomas W.
Hoover, Dewey A.
Humphrey, Paul E.
Jett, Clyde W.
Johnson, Paul D.
Justin, Renate J.
Kabel, Robert N.
Kunkler, Arnold W.
Lancet, Robert O.
Lee, James
Loewenstein, Werner L.
Loving, Jury B.
Luckett, Coen L.
Lvons, L. Mason
McBride, Noel S.
McCrea, Fred R.
McEwen, James W.
McLaughlin, Gordon C.
Mahoney, Charles L.
Malone, Leander A.
Mankin, William J.
Mason, Lester M.
Mattox, Don M.
Miklozek, John E.
Milleson, Ann L. M.
Musselman, Glen G.
Nay, Ernest O.
Neudorff, Louis G.
Pearce, Roy V.
Pu, Pin H.
Reed, Robert C.
Reynolds, Richard J.
Richart, James V.
Riggs, Floyd C.
Rogers, R. Shirrell
Scherb, Burton E.
Schumaker, Robert A.
Showalter, John R.
Siebenmorgen, Paul
Silverman, Norman M.
Speas, Robert C.
Stoelting, J. Lewis
Strecker, William L.
Sullivan, John M.
Topping, Malachi C.
Veach, William L.
Voges, Edward C.
Weber, Joseph G. S.
Weinbaum, Jack G.
White, James V.
Zwerner, Paul F.

WARRICK COUNTY

Harless, O. Fred
Hoover, Peter B.
Rudolph, K. J.
Stover, Wendell C.
Terry, Robert H.

WASHINGTON COUNTY

Paynter, William
Tower, Thomas K.

Salem

Apple, Eddie R.
Coleman, Henry G.
Episcopo, Arsenius R.
Fultz, Roy L.
Huckleberry, Irvin E.

WAYNE-UNION COUNTIES

Adney, Frank B.
Barton, Willoughby M.
Brooks, G. Tanner
Coble, Frank H.
Daggy, James R.
Dingle, Paul E.
Ebbinghouse, Tom
Guthrie, James R.
Hutchison, Donald R.
Johnson, George M.
Lee, Glen Ward
Logan, James Z.
Loomis, Charles H.
Mader, John H.
Malcolm, Russell L.
Meredith, Elwood
Passino, James
Pentecost, Paul S.
Plasterer, Edward D.
Ramsdell, Glen A.
Ross, Harry P.
Ross, James S.
Runge, Paul W.
Shepard, Fred F.
Sherer, Kenneth E.
Snyder, Morris C.
Warrick, Francis B.
Weitemier, Raymond A.
Zeps, E. Frances

WELLS COUNTY

Bishop, Robt. E.
Boonstra, Charles E.
Bradley, Louis F.
Buckner, Joy F.
Caylor, Charles H.
Caylor, Harold D.
Caylor, Truman E.
Collins, Jack T.
Cook, Robert G.
Davidoff, Manuel A.
Dorrance, Thomas O.
Eisaman, Jack L.
Gingerick, Charles M.
Gitlin, Max M.
Gitlin, William A.
Hardin, Wayne E.
Jackson, Charles E.
Kephart, S. Bruce
Matzen, Richard N.
Meier, Donald W.

Milroy, Robert A.
Panos, Constantine G.
Pietz, David G.
Symon, William E.
Talbert, Pierre C.
Yoder, Richard P.

WHITE COUNTY
Carney, John C.
Dickerson, W. Martin
Forbes, Violet Crabbe
Fullerton, Robert L.
Galbreth, Jesse P. (S)
Hibner, Nolan A.
McClure, Stanley E.
Morris, Warren V.

WHITLEY COUNTY
Heritier, C. Jules
Langohr, John L.
Lehmberg, Otto F. C.
Mishler, Joe B.
Reid, Donald B.
Stalter, Gaylord W.
Vogel, John L.

REPORT OF MEMBERSHIP AND BUILDING FUND

Contributions as of 7/31/1963

County Society	Active Members Dec. 31, 1962	Number of Contributions	Percentage Given
1st District			
Gibson	13	12	92%
Perry	10	10	100%
Pike	2	0	0%
Posey	8	6	75%
Spencer	3	0	0%
Vanderburgh	212	114	54%
Warrick	7	7	100%
TOTAL	255	149	60%
2nd District			
Daviess-Martin	17	3	18%
Greene	13	3	23%
Knox	37	32	86%
Owen-Monroe	54	7	13%
Sullivan	9	7	78%
TOTAL	130	52	40%
3rd District			
Clark	31	13	42%
Dubois	21	13	61%
Floyd	33	13	39%
Harrison-Crawford	8	8	100%
Lawrence	24	11	46%
Orange	8	8	100%
Scott	3	3	100%
Washington	7	7	100%
TOTAL	135	76	56%
4th District			
Bartholomew-Brown	39	32	82%
Dearborn-Ohio	19	16	84%
Decatur	10	10	100%
Jackson	17	16	94%
Jefferson-Switzerland	23	17	74%
Jennings	6	6	100%
Ripley	9	3	33⅓%
TOTAL	123	100	81%
5th District			
Clay	11	9	82%
Parke-Vermillion	17	13	76%
Putnam	15	13	87%
Vigo	104	80	77%
TOTAL	147	115	78%
6th District			
Fayette-Franklin	17	2	12%
Hancock	20	1	05%
Henry	34	14	41%
Rush	11	11	100%
Shelby	16	7	44%
Wayne-Union	67	29	43%
TOTAL	165	64	39%
7th District			
Hendricks	17	5	29%
Johnson	28	16	57%
Marion	779	247	32%
Morgan	13	1	08%
TOTAL	837	269	32%
8th District			
Delaware-Blackford	98	96	98%
Jay	15	10	67%
Madison	91	26	29%
Randolph	19	15	79%
TOTAL	223	147	66%
9th District			
Benton	5	1	20%
Boone	15	3	20%
Clinton	15	8	53%
Fountain-Warren	14	14	100%
Hamilton	20	2	10%
Montgomery	25	25	100%
Tippecanoe	104	89	86%
Tipton	10	10	100%
White	10	8	80%
TOTAL	218	160	73%
10th District			
Jasper-Newton	11	11	100%
Lake	382	341	89%
Porter	26	24	92%
TOTAL	419	376	90%

County Society	Active Members Dec. 31, 1962	Number of Contributions	Percentage Given
11th District			
Carroll	7	6	86%
Cass	32	18	56%
Grant	63	50	79%
Howard	51	42	82%
Huntington	20	16	80%
Miami	11	6	55%
Wabash	21	0	0%
TOTAL	205	138	67%
12th District			
Adams	13	13	100%
Allen	248	171	70%
DeKalb	16	15	94%
LaGrange	8	7	88%
Noble	13	1	08%
Steuben	13	11	85%
12th District (Cont'd)			
Wells	29	26	90%
Whitley	19	7	37%
TOTAL	359	251	70%
13th District			
Elkhart	99	87	88%
Fulton	9	2	22%
Kosciusko	17	12	70%
LaPorte	87	66	76%
Marshall	23	18	78%
Pulaski	5	1	20%
St. Joseph	210	125	60%
Starke	6	6	100%
TOTAL	456	317	70%
TOTAL ALL UNITS	3672	2214	60%

ESTATE ANALYSIS SURVEY & SERVICE
With recommendations on estate creation, conservation & distribution

Personal insurance planning

Business insurance planning

C. WALDO BRYANT
1240 N. Delaware Street
Indianapolis 2

Gleaned from the British Medical Journal

JACK W. HICKMAN, M.D.
Indianapolis

The troublesome problem of neuropathy in patients with diabetes mellitus is the object of a paper by Lawrence and Locke from the Joslin Clinic.[1] They present their findings of diabetic neuropathy in juvenile diabetics. Fifteen such patients all under the age of 16 are presented with rather clear-cut findings. Usually, diabetic neuropathy has been associated with long-standing cases of diabetes mellitus so this report is of particular interest. In the authors' series, six of the patients had a duration of illness of under one year. This is in contrast with early, undocumented statements that this "complication" was one that was associated most closely with duration of diabetes. In one patient the disease had been diagnosed only two weeks prior to the onset of the neuropathy. Certainly, a number of practicing internists have seen diabetic neuropathy as the initial manifestation of the diabetic state. Findings such as this, of course, are in a way discouraging because they tend to also destroy our faith in prevention of complications of diabetes by close chemical management. Along this same line, it is becoming more and more apparent that diabetes mellitus is more than just a disorder of sugar and insulin metabolism, and that its effects are far-reaching and varying.

* * *

Our friends in Great Britain are also in the throes of problems concerned with instituting qualifing examinations for general practitioners. Since the American Academy of General Practice has been studying the question of instituting a "Board of General Practice," these same thoughts have occurred to the College of General Practice in Great Britain. A letter that appeared tucked into the correspondence section of the *British Medical Journal* by the respected Professor of Medicine, G. W. Pickering[2] stirred up another hornets' nest of correspondence. Dr. Pickering opposes such qualifying examinations for general practitioners. The controversy continued for a number of months and finally forced an editorial comment by the editors.[3] In this editorial it is pointed out that there are currently 77 degrees and diplomas that are available to examinees in Great Britain, and *The British Medical Journal* rightly concludes that another examination is not what is needed to improve the quality of medicine in their country. The American group has taken a similar stand; however, we may not have heard the last of a qualifying Board of Examiners for general practitioners in either country.

* * *

The list of charges against cigarette smoking seems to grow almost daily, and another charge is leveled against it by Mustard and Murphy.[4] In their study the authors report on a series of seven men between the ages of 35 and 72 who were all cigarette smokers. The authors found that platelet survival time was significantly shorter, and platelet turnover was greater when these men were smoking than when they were not smoking. These changes resulted in only minor variations in blood coagulation or blood lipid levels. Some comment should be made about this study because the group is quite small; three of the patients in the study had sustained myocardial infarctions, two had had cerebral vascular accidents, one had recurrent

thrombophlebitis, and one had chronic bronchitis and emphysema. It is true that in a group study such as this the changes may be significant; however, this patient population is certainly open to some question about its validity as far as applying these figures to the population at large.

* * *

A large series of cases of testicular tumors is reviewed by Hope-Stone et al[5] presenting their work with this condition from 1926 through 1961. During this time, 282 such cases were reviewed. One of the significant points to be evaluated in this study was whether lymphadenectomy adds significantly to the survival rate in the treatment of these tumors. Much has been written on this by a number of authors in the past, and these studies have produced different viewpoints on the problem. After thoroughly studying their cases, the authors report that simple orchiectomy and radiotherapy produced a 43% five-year crude survival rate in the series of patients from 1946 to 1950. In the series from 1951 to 1956, the same rate is 63%. They attribute this to an improvement in radiation technic in the latter group. Their studies show that the results of radiotherapy after simple orchiectomy compare favorably with the procedures involved in lymphadenectomy. It is their feeling that there is, therefore, no indication for performing lymphadenectomy when there are adequate facilities available for radiotherapy.

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4. Mustard, J. F., Murphy, E. A.: Effect of Smoking on Blood Coagulation and Platelet Survival in Man. *Brit. Med. J.* 5334: 846-849, 1963.
5. Hope-Stone, H. F., Blandy, J. P., Dayan, A. D.: Treatment of Tumors of the Testes. *Brit. Med. J.* 5336: 984-989, 1963. ◄

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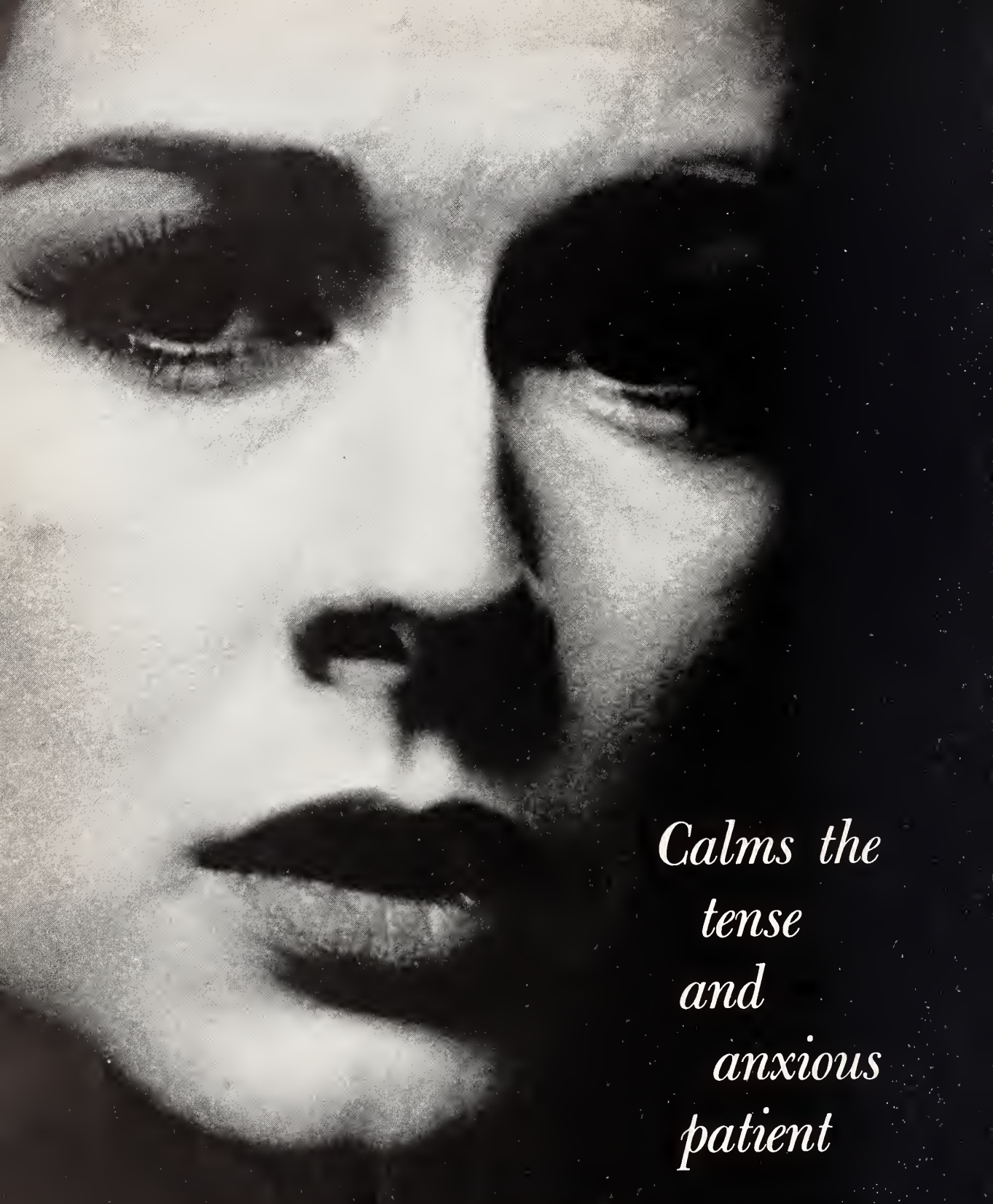
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DAY BY DAY WITH THE FDA

From the FDA Reports on Enforcement and Compliance.

The FDA has found that model engine fuel has been offered for sale in containers suitable for household use and without proper labeling. The "Missile Mist" brand contains 52% methyl alcohol and was not labeled to indicate that the vapors are dangerous, that the fluid is flammable or that ingestion of it is dangerous. There has been at least one instance in which three teenagers were burned fatally by a model engine fuel explosion, the container being so thoroughly damaged as to make identification of the brand impossible.

* * *

The manufacture, sale and dispensing of imitation and counterfeit drugs is becoming a large business or was until recent seizures by the FDA. One large wholesale drug firm in Texas specializes in the distribution of imitations and counterfeits. Such monstrosities are usually shipped to retailers in large unlabeled containers and are liable to serious mix-ups. Most of the phony tablets contain the proper drug, but without any standardization as to purity and dosage. Others are composed of inert materials. All are marked with the identifying mark used by the rightful manufacturers. All druggists are being warned to beware of drugs bought outside regular channels.

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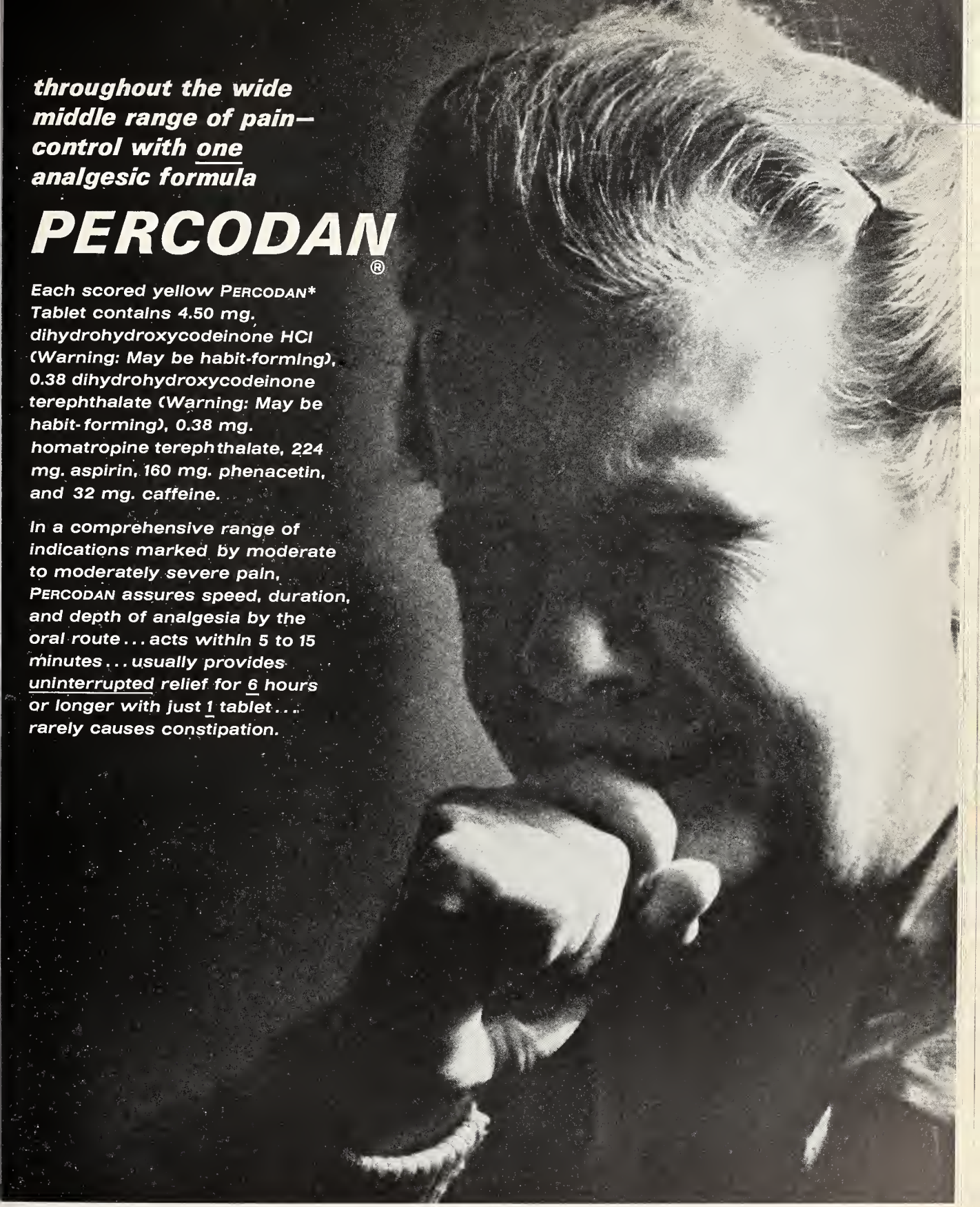
Treatment of mastitis in cows by sulfonamide and antibiotic preparations is effective and prevents the financial loss which formerly resulted from ineffective treatment. However the introduction of sulfonamide drugs and antibiotics into the milk for several days after treatment renders the milk unsuitable for human consumption. Even small amounts of the drugs may cause serious reactions in people who are sensitive. Tests to detect minute quantities in milk are being devised to help the dairy farmer determine how soon after mastitis treatment the milk may be marketed. FDA has just announced such a test for sulfonamide compounds. It is sensitive enough to detect one part of sulfonamide in 10 million parts of milk.

* * *

The FDA continues to ferret out and seize stocks of X-33 Water Repellent, a product which is dangerously inflammable and has caused flash fires and personal injury. Eight seizures in five states occurred recently, one of the seizures took place in Brookston, Indiana.

* * *

Illegal sales of amphetamine continue to be detected by the FDA and there were at least 14 convictions obtained during the month of May. Most of the retail outlets are truck stops. One, William E. Tolen, (formerly Oaks Truck Stop) in Lafayette, Indiana, was sentenced to six months in jail, suspended, and placed on one-year probation for peddling amphetamine. Amphetamine pills, known as "bennies", "pep pills" and the like, are sold to truck drivers and others as stay-awake pills. The drug is also used with alcohol to obtain a heightened effect. The danger for drivers is that amphetamine may cause excessive nervous stimulation, loss of desire for sleep, impairment of judgment, hallucinations and mental derangement. ◄



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Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Chemical Test may Expunge Drunk-driving Conviction on Guilty Plea—Even though he pleaded guilty to a charge of driving while intoxicated, a motorist has a chance of having his sentence vacated on the basis of the results of a test to determine the alcohol level in his blood. On appeal, an intermediate appellate court in New York ordered a hearing to be granted to determine whether his sentence should be vacated.

The defendant was arrested in the early hours of the morning, a blood specimen was taken for testing, and he was immediately brought before the court and arraigned on a charge of driving while intoxicated. He pleaded guilty and was sentenced to pay a fine and have his license revoked.

Subsequently the test results showed that the alcohol volume by weight in the defendant's blood was not sufficient to sustain the charge of driving while intoxicated under the standards established in the statute.

People of the State of New York v. Shields, 239 N.Y.S. 2d 582 (N. Y., Nov. 9, 1962).

Negligence not Inferred from Chloromycetin Prescription—The fact that a physician prescribed Chloromycetin in the treatment of a four-year-old child who died from aplastic anemia was not proof of negligence or improper practice. Nor was the drug manufacturer guilty of negligence because it failed to warn the public generally of the alleged dangerous characteristics of this drug. Verdict was directed in favor of both defendants by a U. S. District Court.

After having been treated by a number of physicians, the child was brought to the defendant. On the second visit, the physician found that the child was suffering from an ear infection for which he prescribed Chloromycetin. Several months later the child died. According to some testimony, death from aplastic anemia was caused by the drug Chloromycetin.

The burden of proof was on the plaintiff to establish by a preponderance of the evidence that the physician, by prescribing this drug, failed to exercise that degree of care and skill ordinarily exercised by the profession in the same line of practice in his own or similar locality. The court pointed out that no inference of negligence may be drawn merely from the result of the treatment. The only expert witness on this issue was the doctor called by the plaintiff who not only testified that the drug was widely used to combat a variety of infections but that it was also used, with a certain risk which had to be borne in mind by the physician, for minor infections. He testified further that, according to some figures, the risk was one out of 800,000 that aplastic anemia would result from the use of Chloromycetin.

The only other evidence submitted by the plaintiff was to the effect that the drug manufacturer circulated literature recommending that the drug not be used for minor infections. However, the court held this evidence to be inadmissible in view of a failure to produce copies of the literature or to prove that the literature was actually circulated.

As for the failure of the drug company to warn the general public, the court held there was no reason why there should be such a warning in view of the fact that this drug, unlike one sold over the counter to anyone, could not be obtained except on a doctor's prescription.

Stottlemire v. Cawood, 213 F. Supp. 897 (D.C., D. of C., Jan. 29, 1963).

Hospital Sued for Refusing to Admit Emergency Patient—A patient who had both legs amputated after they were frozen has filed suit, on June 4, 1963, against a hospital. He claims that the loss of his legs resulted from the refusal of the hospital to admit him or to give him emergency treatment.

The patient had spent the night in his car which had run into a snow bank. Temperatures were estimated at 10 to 15 degrees below zero. He was rescued the next morning by a bus driver.

The patient claims that his physician sought to have him admitted to the hospital that morning, but that his admission was refused because he could not pay a $25 fee. He also claims that he unsuccessfully sought admission to the hospital on each of the next four days. On the following day, he was admitted to the University of Kansas Medical Center where the amputations were performed five days later.

Stanturf v. Wright Memorial Hospital, U.S.D.C., W.D., Mo. (Mo., June 4, 1963).

Refusal of Bed Rails Precludes Damages for Fall—A jury refused to award any damages to a 66-year-old patient who fell from a hospital bed. The patient had asked for $3,500, including $2,500 for loss of earnings for five months and $385 for medical expenses.

On entering the hospital for tests for possible leukemia, the patient signed a release for any resulting injury. A nurse testified that he had refused bed rails because he didn't want to "be a baby." Five days later, he fell out of bed. The nurse said the patient was trying to go to the bathroom. The patient said he was groggy from pills and milk of magnesia.

Hurwich v. Louis A. Weiss Memorial

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Hospital, Cir. Ct. of Cook Co., Docket No. 56C-955 (Ill., June 5, 1963).

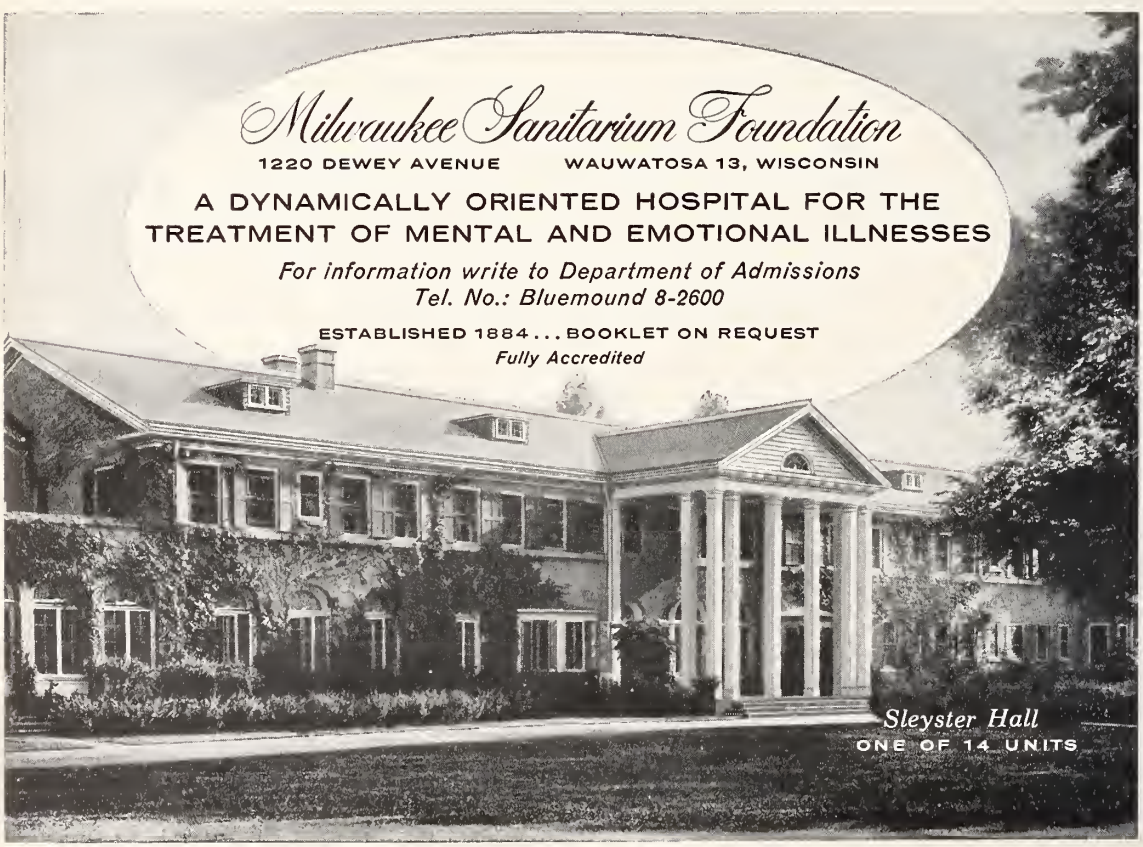
Religious Freedom Doesn't Permit Parent to Deny Child Necessary Medical Care —A divorced mother's continuing custody of minor children will be so conditioned as to eliminate the need for her consent to necessary transfusions of blood or plasma. The Court of Appeals of Maryland ruled that the mother's religious practices could not be permitted to interfere with the welfare of her children.

The parents were both Roman Catholics at the time of their marriage. The father is a licensed physician and surgeon; the mother was a registered nurse. The mother became a Jehovah's Witness and was divorced by the father. The mother was given custody of their three children.

The youngest child, a boy, suffered a bleeding ulcer. Although advised that the boy might die if he did not receive a blood transfusion, the mother refused to consent because of her religious beliefs. Doctors obtained telephone consent from the father, a transfusion was given, and the boy recovered. The court found that he would have inevitably died if he had not received the transfusion. The hospital, acting through the father's attorney, also obtained a court order authorizing the transfusion. The mother testified that, should the situation arise again, she would deny her children a blood transfusion even if the result of her action was swift and sudden death.

The trial court did not remove the children from the custody of the mother, but conditioned her right to custody by requiring immediate written notice to the court if any of the children should be hospitalized and requiring periodic reports by competent pediatricians. The appellate court agreed that the mother should retain custody, but felt that further safeguards were necessary. It said:

> ". . . It is quite possible that if another occasion requiring a transfusion should arise for this boy or for either of his sisters there might not be time to communicate with the father or to



obtain a court order, as there was in December, 1961. There is some risk in leaving the children in the mother's custody at all, whether it be called a calculated risk or not. However it may be designated, it should be reduced to a minimum. We think that if the children are to remain in the mother's custody, this can be accomplished, in view of her declared attitude, only by amending the decree in such manner as to provide that the mother's consent to the use of blood transfusions or of plasma for any of the children shall not be required and by specifying conditions upon which any licensed physician or surgeon in this State may administer blood or plasma when, in his judgment, the administration of blood or plasma shall be necessary to protect the life or health of any of these children."

Levitsky v. Levitsky, 190 A. 2d 621 (Md., May 7, 1963).

No Liability for Hospital Fall Where Bed Rails Were Not Ordered—A directed verdict in favor of a hospital ended a suit in which a patient asked for $5,000 for a fractured clavicle resulting from a fall from a hospital bed.

The patient entered the hospital for an operation on the tear duct of the left eye. No evidence of negligence on the part of hospital personnel was presented, the court ruled. The attending physician testified that he had not ordered bed rails. A mistrial had previously been granted, because the physician was asked whether he had ordered bed rails. At the second trial, however, the judge allowed the question to be asked and answered.

Wax v. Michael Reese Hospital, Super. Ct. of Cook Co., Docket No. 56S-18198 (Ill., March 15, 1963). ◄



Blue Shield Payments by Medical Classification

(One of a series prepared by Blue Cross-Blue Shield)

The table below portrays dramatically the changing role of Indiana Blue Shield. Our Enrollment Division continues to place emphasis upon the sale of broader benefits paralleling good medical practice, and at the end of 1962 the situation was the best ever.

Anesthesia payments totaled $1,604,628 for the year, and diagnostic benefits amounted to $1,410,335. These benefits were not available in 1949. In-hospital medical benefits were $3,453,776 in 1962, and only $8,411 in 1949. Significant increases also occurred in payments for "all other surgery" and radiation therapy.

Blue Shield knows that if members do not have adequate prepayment coverage they will look to the Government for help. If a benefit program is too limited, or the allowance too meager, members will become more and more interested in Medicare as a solution to their problems. That's one reason Blue Shield benefits have been expanded to match today's medical practice, a program that will be continued in the years ahead.

Medical Classification	AMOUNT PAID 1949	1962	1962 Over 1949
SURGICAL:			
T & A	$ 144,955.00	$ 560,089.46	3.9
Eye, Ear, Nose & Throat	72,388.00	1,255,583.19	17.3
Appendectomy	205,840.00	370,535.50	1.8
Hernia	42,690.00	685,939.00	16.1
Abdominal	91,910.00	1,207,042.50	13.1
Proctology & Urology	109,518.50	1,469,614.05	13.4
Orthopedics	114,395.50	1,847,046.33	16.1
Radiation Therapy	9,786.00	250,385.50	25.6
All Other Surgical	110,903.50	2,643,573.38	23.8
Total Surgical	$ 902,386.50	$10,289,808.91	11.4
MEDICAL	$ 8,411.00	$ 3,453,776.84	410.6
MATERNITY:			
Deliveries	$ 259,764.00	$ 1,839,555.10	7.1
Gynecology	261,854.50	1,454,129.78	5.6
Total Maternity	$ 521,618.50	$ 3,293,684.88	6.3
ANESTHESIA	*	$ 1,604,628.57	
DIAGNOSTIC	*	$ 1,410,335.73	
GRAND TOTAL	$1,432,416.00	$20,052,234.93	14.0

* These benefits not available in 1949.

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Larry L. McCallister, 72 Vanness Ct., Maplewood, N. J.

Ben Graber, Lutheran Hospital, Fort Wayne, Ind.

Paul Genstler, 215 S. St. Peter St., South Bend, Ind.

SPECIALISTS

Alfred D. Biggs, 2624 Forbes Dr., Omaha, Nebr.—*Internal Medicine* (available October, 1964)

Gerald F. Peppers, 913 19th Ave., East, Seattle, Wash.—*Internal Medicine* (available July, 1964)

Peter P. Mayock, Jr., R. D. #2, Sayre, Penn.—*Internal Medicine*

Frances Samborski, 116 Hamilton St., Geneva, N. Y.—*Psychiatry*

Terry J. Turkat, 10941 Strathmore Rd., Los Angeles, Calif.—*Radiology*

Thomas A. Buzard, 5919 Greene St., Philadelphia 44, Penn.—*General Surgery*

Guy B. Maynard, Jr., 60 Eighth St., New Bedford, Mass.—*Insurance or Student Health*

Martin O. Greaney, Jr., U. S. Naval Radiological Defense Laboratory, San Francisco 24, Calif.—*Administrative or Industrial*

LOCATIONS

Clinton County—COLFAX—population 800. Located close to Lafayette and Frankfort where hospitals are available. Community without the services of a physician. Rich farming area. For further details contact Rev. James Byrd, Colfax, Ind.

Wayne County—HAGERSTOWN—population 2,650. Trading area of 10 to 15 miles without a physician. Two physicians in the town—one is retiring. Hospitals located at Richmond, 18 miles away and New Castle, 12 miles from Hagerstown. For further details contact Mr. M. H. Davis, 550 West Main St., Hagerstown, Ind.

White County—MONTICELLO—population 3,500. County seat town located in a lake region of Indiana. County hospital in the town. Need for another general practitioner. Contact Mr. Paul Neininger, president of the State and Savings Bank, Monticello, or Mr. George R. Banjak, administrator of the White County Memorial Hospital, Monticello. ◄



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ABSTRACTS

BOOK REVIEWS

THE SPLEEN

Blaustein, Ancel, M.D., editor, plus five additional contributors. McGraw-Hill Book Co., New York 1963. $12.50. 233 pages, numerous illustrations and tables.

The spleen has been, traditionally, a structure honored more by neglect than by study. Advancing knowledge has made it possible for some half dozen authorities to get together and compile the first fairly comprehensive monograph dealing exclusively with this one organ.

Of course, there is still *much* that is unknown. However, we are reading here no mere codification of ignorance. On the contrary, modern technics such as work with the electron microscope, isotopes, immune fluorescent procedures, etc., has brought forth much that is new and thought provoking.

The bulk of the volume is devoted to the pathology of the spleen. This single chapter closes with 25 pages of references: some sort of a record and no small tribute to the industry of the authors!

On p. 50 there starts a tabulation of the causes of splenic enlargement: massive, moderate and minimal. This alone is splendid for reference and worth the attention of any physician. The Differential Diagnosis of Splenomegaly is the title of chapter four: all by itself it is well worth the price of the book. The differentiation of functional splenic hyperplasia from hypersplenism is extremely clear.

The publishers have used splendid paper, printing and binding. Errors are very few, indeed. Overall, this is a very readable, interesting and surprisingly valuable monograph; I can recommend it without equivocation.

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

Abstracts From Various Literature, Prepared by AMA

RADIATION AND THE WORLD WE LIVE IN

The basic dilemma in the handling and control of radiation is the nearly complete absence of positive knowledge of the specific effects of radiation on man at low or even moderate exposure levels. In any radiation control program, standards are necessary, but the occupational-exposure standards do not represent a dividing line between safety and injury, or risk and no risk; they are instead standards of good practice. In addition, the distinction



between permissible occupational levels, or management control guides, and exposure of the general population has been recognized for a long time, but has never been clearly presented to the public. It is probable that the concept of a permissible dose cannot be applied rigorously in a large-scale emergency situation, although the aim should be to keep the exposures as low as possible.

Taylor, L. S.: Radiation and the World We Live In, *Radiology* 80:359 (March) 1963.

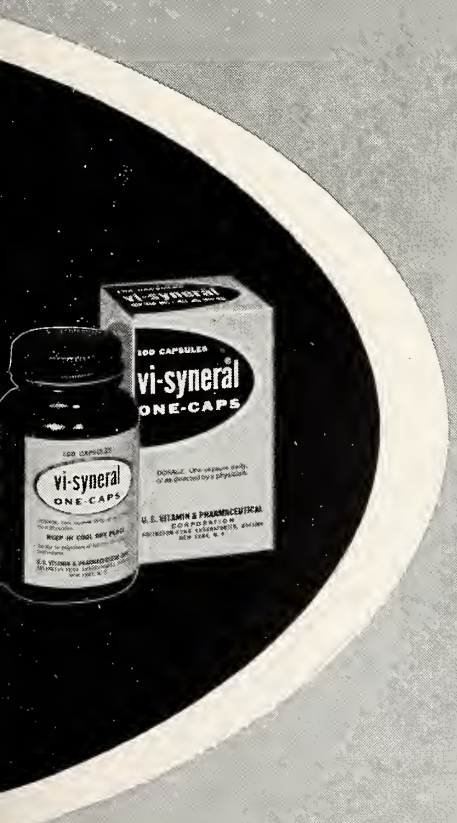
FANCONI SYNDROME SECONDARY TO OUTDATED TETRACYCLINE

A 38-year-old woman was in good health, with no history of any metabolic or renal disturbances, until she had ingested one gm of tetracycline daily for about seven days. The tetracycline was considerably outdated and had been kept at tropical temperatures for several weeks before it was used. Several days after she started therapy, weakness and anorexia developed, both progressively severe, followed by nausea and profuse vomiting several days later, for which she was hospitalized. Laboratory data on her admission revealed glucosuria, acetonuria, proteinuria, slightly elevated blood urea nitrogen, normal fasting blood sugar, low serum uric acid, low serum sodium and potassium, and low carbon dioxide combining power. This pattern continued, despite vigorous therapy, for many days. Subsequent examination revealed increased excretion of calcium and phosphorus in the urine, marked amino-aciduria, and marked polyuria. The patient gradually improved with vigorous supportive therapy, and on the 49th day of hospitalization she was discharged, having presented normal data.

Gross, J. M.: Fanconi Syndrome (Adult Type) Developing Secondary to Ingestion of Outdated Tetracycline, *Ann. Intern. Med.* 58:523 (March) 1963.

PROPHYLACTIC CONTROL OF INFECTION OF URINARY TRACT CONSEQUENT ON CATHETERIZATION

Infections of the urinary tract follow catheterization too frequently. They are almost invariable in paraplegics who have carried an indwelling catheter for a fortnight. In the experience of the authors, a spray containing a mixture of antibiotics has been more effective than the antiseptics in common use in killing the *aerogenes*, *proteus*, and *pyocyaneus* groups of bacteria and is much less toxic to human leukocytes. Therefore the following procedure has been adopted in catheterization: The catheter is changed daily and is inserted only after (a) preliminary spraying of the external genitals with the mixture, (b) irrigation of the anterior urethra with 2 ml of a solution containing 1.0% each of neomycin and bacitracin and 0.4% of polymyxin (the antibiotics in the mixture), and (c) a second spraying of the parts after an hour. Using these measures, the authors believe they



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ASCORBIC ACID (C)	75 mg.	(Phosphorus	39 mg.)
THIAMINE MONONITRATE (B_1)	3 mg.	FERROUS SULFATE EXSICCATED	50 mg.
RIBOFLAVIN (B_2)	3 mg.	(Iron	15 mg.)
PYRIDOXINE HCl (B_6)	1 mg.	COPPER	1 mg.
NIACINAMIDE	20 mg.	IODINE	0.1 mg.
VITAMIN B_{12}	3 mcg.	MANGANESE	1 mg.
d, CALCIUM PANTOTHENATE	5 mg.	MAGNESIUM	1 mg.
VITAMIN E (d, alpha tocopheryl acetate)	1 Int. Unit	ZINC	1 mg.

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Arlington-Funk Laboratories, division • New York 17, N. Y.

have delayed infection of the urine by the coliform group in paraplegics for many weeks.

McLeod, J. W., Mason, J. M., Pilley, A. A.: Prophylactic Control of Infection of Urinary Tract Consequent on Catheterization, *Lancet* (London) 1:292 (Feb. 9) 1963.

ACETYLSALICYLIC ACID GASTRITIS

Four cases of hemorrhagic gastritis due to ingestion of acetylsalicylic acid are presented. With use of the fiberscope, color photographs of the stomach, previously lacking in the literature, are shown. Hemorrhagic gastritis due to acetylsalicylic acid is characteristically painless. Gastrointestinal x-rays are usually normal. The lesions seen at gastroscopy are superficial, multiple, and heal within five to ten days. In two cases where gastroscopy was delayed, lesions were produced by administration of acetylsalicylic acid. One patient, a particularly difficult diagnostic problem, was hospitalized several times because of melena. Multiple gastrointestinal x-ray studies were normal, and exploratory laparotomy did not reveal a bleeding site. History was then obtained of ingestion of acetylsalicylic acid for dysmenorrhea. Administered after control gastroscopy, the drug caused bleeding from multiple superficial erosions in the stomach. Follow-up on all cases showed no further bleeding after discontinuing administration of acetylsalicylic acid.

Vickers, F. N., Stanley, M. M.: Acetylsalicylic Acid Gastritis: Gastroduedenoscopic Observations, *Gastroenterology* 44:419 (April) 1963.

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UNDE VENIS?

In these days of fast and frequent travel there is no infection endemic to one part of the world which may not appear in another. Exotic diseases some of which may cause medical emergencies are often missed in general practice because the doctor has not been conditioned to ask the patient where he has been or is unable to analyze the answer in terms of global medicine. The geographical history is a vital part of the patient's clinical history and all doctors should be aware of this, especially when dealing with patients who have been in the tropics. Methods of conditioning the profession are discussed, including the suggestion that the words "geographical history" should be included in hospital and student's case sheets. Official documents presented to travellers on arrival in Europe from the tropics should cover risks to patients (for example, malaria) as well as to the community (for example, smallpox).

Maegraith, B. G.: Unde Venis?, *Lancet* (London) 1:401 (Feb. 23) 1963.

DIAGNOSIS AND TREATMENT OF BRONCHOGENIC CARCINOMA

Truly adequate tools for early diagnosis of carcinoma of the lung are not available. Most important is the physician's acute sensitivity to the insidious nature of this disease and its great frequency in men past 40 with long histories of smoking. In addition, routine x-ray films of the chest at frequent intervals, possibly on a community-wide basis, offer the greatest potential case-finding means at the present time.

Weinstein, H. J.: Current Appraisal of Diagnosis and Treatment of Bronchogenic Carcinoma, *Dis. Chest* 43:404 (April) 1963.

IPECACUANHA POISONING: ANOTHER FATAL CASE

Yet another unwitting substitution of fluid extract of ipecac for the syrup form has led to a needless fatality. The clinical course and necropsy findings in this case are reported; the case of a second patient who recovered is also described. It is suggested that additional cases may have slipped by undetected. While syrup of ipecac has a place in managing accidental ingestions, the availability of two contrasting liquid forms differing by a factor of 14 in their alkaloidal content in the Pharmacopeia of the United States has led to confusion and error. The concentrated form is to be deleted from future editions. It is urged that it also be deleted from the British Pharmacopeia.

Speer, J. D., Robertson, W. O., Schultz, L. R.: Ipecacuanha Poisoning: Another Fatal Case, *Lancet* (London) 1:475 (March 2) 1963.

FARMER'S LUNG

An instance of farmer's lung syndrome in its chronic stage is described in a 49-year-old farmer. The case illustrates the typical clinical features of the disease, and the results of repeated exposure

to the offending moldy hay. During two exacerbations, steroids were used without definite benefit. Improvement followed the cessation of farming activities. The histopathology of a lung biopsy is described.

Page, M. I., Hawn, C. VanZandt: Farmer's Lung: Case Report, *Amer. Rev. Resp. Dis.* 87:576 (April) 1963.

PHENISTIX IN PSYCHIATRIC PRACTICE

Phenistix is a paper-reagent strip, one end of which is impregnated with ferric ammonium sulfate, magnesium sulfate and cyclo-hexyl sulfamic acid. It is an adaptation of the traditional ferric-chloride test and has been introduced to facilitate the mass screening of infants for evidence of phenylketonuria. The test is carried out by dipping the impregnated end of the strip in urine and observing any color change. A positive result for phenylketonuria is indicated by a grey-green color change appearing within 30 seconds. This paper reports the use of Phenistix in a survey of patients in a mental hospital, with particular reference to its possible use in the detection of chlorpromazine in urine. When the urine of a patient taking chlorpromazine is tested with Phenistix, a grey to blue-purple color is produced, depending on the dosage of the drug. The color change is distinct from that produced by phenylpyruvic acid. It appears immediately, fades within a few seconds. Using urine from patients not taking chlorpromazine as controls, significant color changes are more readily detected. Urine specimens from 600 patients, 272 men and 328 women, were tested. Phenistix gave a positive reaction with the urine of 119 of 135 (88%) men and 154 of 177 (87%) women who were being treated with chlorpromazine. The test was reliable in detecting chlorpromazine metabolites in the urine, and in revealing patients who were not taking prescribed chlorpromazine. The test may prove useful in out-patient practice, and it is suggested that it may be a useful method of ensuring a regular drug intake by patients discharged from mental hospitals on a maintenance dose, and thus preventing relapse. One previously undiagnosed adult case of phenylketonuria was found in this survey.

Scott, J. C.: Phenistix in Psychiatric Practice, *Scot. Med. J.* 8:30 (Jan.) 1963.

GROWTH INHIBITION OF PREMATURES RECEIVING TETRACYCLINE

Observations on the effect of tetracycline on the developing skeleton reveal that (1) transplacentally acquired tetracycline deposits readily as a fluorophore throughout the human fetal skeleton; (2) tetracycline administered to the premature infant produces a 40% depression of normal skeletal development as measured by the inhibition of fibula growth; (3) fibula growth inhibition is rapidly reversible following a short-term administration of tetracycline; and (4) the administration of 40 mg/kg/day tetracycline during the 10th to the 15th day of gestation in the rat results in a 28% reduction in expected fetal size at term.

Cohlan, S. Q., et al: Growth Inhibition of Prematures Receiving Tetracycline, *Amer. J. Dis. Child.* 105-453 (May) 1963.

INTERMITTENT FASTS AND INTRACTABLE OBESITY

Intermittent fasts—5 to 14 days—in the correction and control of intractable obesity afforded the opportunity for clinical evaluation while the patients lost 0.7 to 1.8 kg per day. A subjective sense of well-being and lack of hunger was attributed to the hyperketonemia provoked by the fast. Pregnancy, uncontrolled labile diabetes, peptic ulcer. and recent hepatic and myocardial disease were considered contraindications to the total fast. During the fast, water, noncaloric beverages, weak tea, and coffee were allowed. Serum electrolytes, cholesterol, CO_2, fibrinolytic activity, and steroid excretion were normal, although the urinary loss of NaCl exceeded the normal initially. Previously undiagnosed hypertension, diabetes, prediabetes, and cholelithiasis were frequent findings. Fasting reduced all cases of mildly elevated blood pressure to normal. Diets of 1,500 to 2,300 calories daily, with 1- or 2-day fasts at 7- to 10-day intervals, served to reduce the weight further while permitting a more liberal diet on a day-to-day basis.

Duncan, C. G., Jenson, W. K., Cristofori, F. C., Schless, G. L.: Intermittent Fasts in the Correction and Control of Intractable Obesity, *Amer. J. Med. Sci.* 245:515 (May) 1963. ◄

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Full Time Faculty Promotions Listed at I.U. Medical Center

Twenty-nine members of the full time faculty at the Indiana University Medical Center have been promoted in rank.

In the School of Medicine, Morris Green and William E. Segar were named professors of pediatrics. Promoted to associate professor were: Ralph B. Lingeman, clinical pathology; Joseph S. Ingraham, microbiology; Bertram L. Hanna, neurology and medicine; Donald Doehring, neurology; Jesse D. Hubbard, pathology (joint appointment with Dentistry); Mrs. Frances C. Ekstam, physical therapy; Francis L. Abel, Julius J. Friedman and Carl F. Rothe, physiology; and Robert K. Rhamy, urology.

Promoted from instructor to assistant professor were: Lois C. Perkins, anatomy; Roger W. Roeske, biochemistry; Walter J. Daly, C. Conrad Johnston, Jr., Richard C. Powell and Richard B. Schnute, clinical medicine; Mrs. Marilyn Wales McCaman, neurology; Franklin D. Nash, physiology; William P. Fisher, Gerald D. Alpern, Clayton E. Ladd, and Donald R. Ottinger, psychiatry, and Isadore Mandelbaum and John A. Waldhausen, surgery.

Explorer Scouts Goodwill Tour

Thirty Explorer Scouts selected from the members of the George Rogers Clark Council of New Albany, Indiana made a goodwill trip to Europe this summer. The group, between the ages of 13 and 18, were selected on the basis of character and leadership abilities. Accompanying the scouts were Dr. Kenneth M. Eblen of Henderson, Kentucky, Dr. Nelson A. Wolf of New Albany, Byron Drumb, detailman for Smith, Miller and Patch, of New Albany, and Melvin F. Reich of New Albany. They toured England, Holland, Denmark, Sweden, Germany, Switzerland, Italy and France for the purpose of building a person-to-person relationship which will create understanding and goodwill among tomorrow's leaders.

Film on the Radiation Problem Available

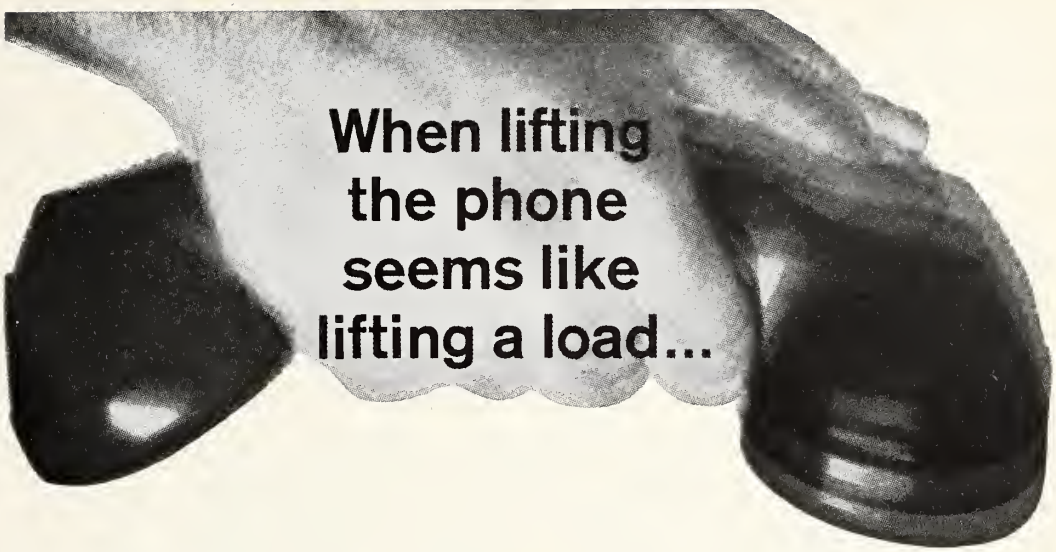
The Atomic Energy Commission has made available for free-loan a new, color motion picture, "Radiation in Perspective", a 43-minute film which relates the hazards of radiation to the other hazards of our industrial society. The 16-mm film presents an understanding of the radiation problem which has been found useful for persons requiring a layman's understanding of the nature of radiation. The film may be obtained by addressing Howard C. Baldwin, U. S. Atomic Energy Commission, 9800 South Cass Ave., Argonne, Illinois.

FISKE ESSAY ON ENZYME CHEMISTRY

The Trustees of America's oldest medical essay competition, the Caleb Fiske Prize of the Rhode Island Medical Society, announce as the subject for this year's dissertation "CLINICAL APPLICATION OF NEWER DISCOVERIES IN ENZYME CHEMISTRY". The dissertation must be typewritten, double spaced, and should not exceed 10,000 words. A cash prize of $500 is offered. Essays must be submitted by December 11, 1963.

For complete information regarding the regulations write to the Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence 3, Rhode Island.

Continued



in chronic bronchitis and emphysema

ISUPREL® BRAND OF ISOPROTERENOL hydrochloride hydrochloride

MISTOMETER® Q.I.D.

ISUPREL (isoproterenol/Winthrop) "...can increase breathing efficiency in pulmonary emphysema."[1] The patient with chronic obstructive pulmonary disease "...should use the bronchodilator four times daily whether or not he experiences episodes of bronchospasm."[2]

Use of the Mistometer eases breathing by relaxing bronchospasm, and aiding productive cough. "Of the aerosol bronchodilators, ISUPREL (isoproterenol/Winthrop) seems to be the best...."[3] Conscientious use q.i.d. improves vital capacity and exercise tolerance.

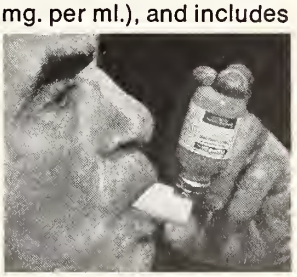
The Mistometer brings new efficacy and convenience—enables patients to maintain treatment wherever they are.

With use of ISUPREL (isoproterenol/Winthrop), occasionally tachycardia, palpitation, nervousness, nausea and vomiting or headache may occur, especially with excessive dosage. Adjust dosage carefully in patients with hyperthyroidism, acute coronary disease, cardiac asthma or limited cardiac reserve, and in persons sensitive to sympathomimetic amines.

Caution: Epinephrine should not be administered with ISUPREL (isoproterenol/Winthrop) as both drugs are direct cardiac stimulants and their combined effects may induce serious arrhythmia. If desired they may, however, be alternated, provided an interval of at least four hours has elapsed.

Dosage: Two inhalations at least one minute apart four times daily, regularly. Inhalations may be taken more often if indicated.

Available as ISUPREL HCl (isoproterenol HCl/Winthrop) Mistometer—single unit combining plastic nebulizer and ISUPREL (isoproterenol/Winthrop) solution 1:400—or 0.25 per cent w/w (=2.8 mg. per ml.), and includes alcohol, 33 per cent; bottles of 15 ml.



1. Reeves, J. E.: *M. Times* 90:512, May, 1962. 2. Williams, M. H., Jr.: *M. Sc.* 11: 433, March 19, 1962. 3. Peckenschneider, L. E.: *J. Kansas M. Soc.* 56:486, Sept., 1955.

Winthrop Laboratories, New York 18, N.Y.

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NEWS NOTES

Continued

Papers Invited by American Thoracic Society

The 1964 meeting of the American Thoracic Society, medical section of the National Tuberculosis Association will be held in New York City, May 25-27, 1964. The Medical Sessions Committee invites submission of original papers on all scientific aspects of tuberculosis and nontuberculous respiratory and cardiopulmonary diseases for presentation at this meeting. Membership of the society is not a prerequisite to participation on the program. Papers to be presented will be selected from abstracts which should be submitted before January 6, 1964. For further details write to Robert Oseasohn, M.D., Chairman, Medical Sessions Committee, American Thoracic Society, 1790 Broadway, New York 19.

Certificates of Fellowship

Certificates of Fellowship in the American College of Chest Physicians were conferred upon 275 physicians at the recent annual meeting of the College in Atlantic City.

Newly inducted Fellows from Indiana are Drs. Antonio R. Cahué of Gary and Francis W. Hare of Madison and Drs. Charles Fisch, Richard H. Jowitt, Bennett Kraft, Erich K. Lang, Harold C. Ochsner and Harry Siderys of Indianapolis.

Catalog of Hollywood Films Available to Indiana Physicians

Films Incorporated (A Division of Encyclopaedia Britannica Films Inc.) of 1150 Wilmette Ave., Wilmette, Illinois will, upon a request written on the letterhead of an organization with which a doctor is affiliated, mail a catalog of over 1500 16-mm. entertainment feature films and short subjects.

These are Hollywood motion pictures and are intended for the entertainment of patients. The listings are classified as to suitability for various occasions and types of patients.

Continued on page 1240

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NEWS NOTES

Continued

Dr. Thompson Elected

Dr. John V. Thompson, Indianapolis, has been elected to the Board of Regents of the American College of Chest Physicians.

Legal Action Is Taken Against Non-accredited School of Nursing

The Modern School of Practical Nursing located in the Ober Building in Indianapolis has been fined $150 plus costs (suspended) for conducting a school of nursing without accreditation. Complaints to the Better Business Bureau were referred to the State Board of Nurses Registration.

Result: Legal action. The school had been telling prospective and beginning students that jobs were available upon graduation when as a matter of fact graduates of the school could not have qualified for licensure as practical nurses.

Six Indiana Insurance Companies Support 1963 Fellowship Programs

Robert F. Ashman of Indianapolis, a student at Columbia University College of Physicians and Surgeons, is one of 18 medical students awarded fellowships for 1963 by the Life Insurance Medical Research Fund. The fellowship program provides up to six years of graduate study for students who plan to make medical research their career.

There are 133 U. S. and Canadian life insurance companies whose contributions support the fund. Six are in Indiana: American United Life, Empire Life and Accident, Indianapolis Life, Lincoln National Life, Peoples-Home Life and State Life.

Dr. Jones Represents AMA

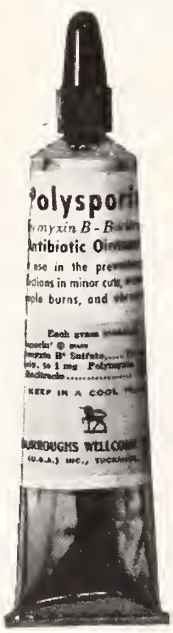
Dr. E. S. Jones of Hammond is attending the International Congress of Occupational Health as the official representative of the American Medical Association. The Congress is meeting in Madrid, Spain, from September 16 to 21.

Contraindications and Side Effects of Certain Ophthalmic Preparations

Recent information gathered by the medical staff of the Food and Drug Adminis-

Continued

in treating topical infections, no need to sensitize the patient



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broad-spectrum antibiotic therapy with minimum risk of sensitization

Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **Supplied:** in ½ oz. and 1 oz. tubes.

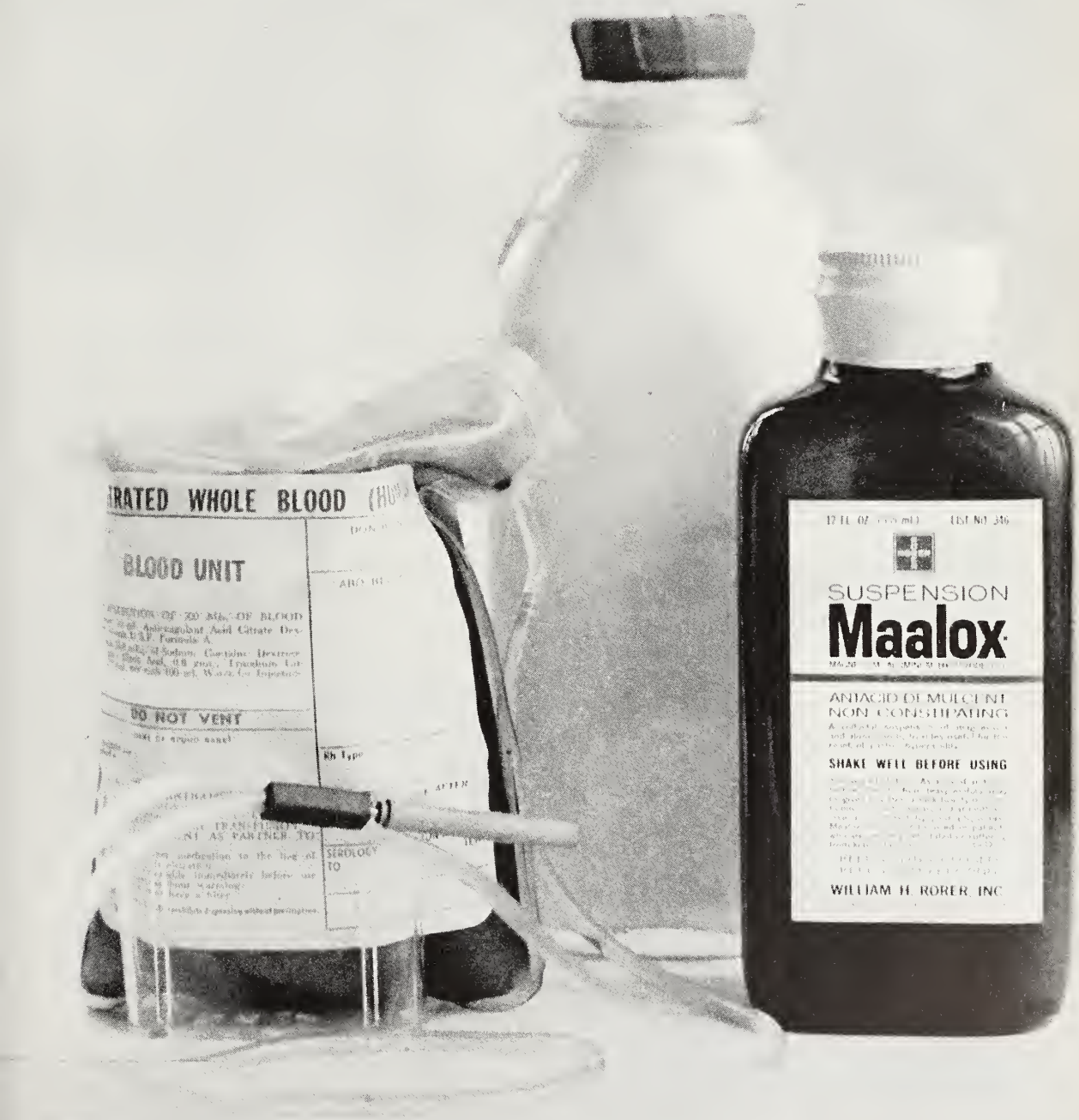
Complete literature available on request from Professional Services Dept. PML.

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Practically standard treatment, now, for perforated ulcer. Why is Maalox included? Antacid therapy *must* continue long after the wound has healed, and patients started on Maalox tend to stay on Maalox. It tastes good; it's effective and will not cause constipation—three important reasons for Maalox over the long haul. Some physicians, we are told, order Maalox routinely for hospital patients on drugs which could irritate. They feel it reduces the likelihood of gastric discomfort. Supplied: Suspension; Tablets No. 1; Tablets No. 2. (Each Maalox No. 1 Tablet is equivalent to 1 teaspoonful and each Maalox No. 2 Tablet is equivalent to 2 teaspoonfuls of Suspension.)



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tration with the assistance of a number of outside medical experts shows a need to warn physicians of certain contraindications to and side effects in the ophthalmic use of *topical corticosteroid preparations*, including their *combinations with antimicrobial* drugs.

1. The following are the *"contraindications":*

a. acute herpes simplex, vaccinia, varicella, and most other viral diseases of the cornea and conjunctiva;

b. tuberculosis of the eye;

c. fungal diseases of the eye;

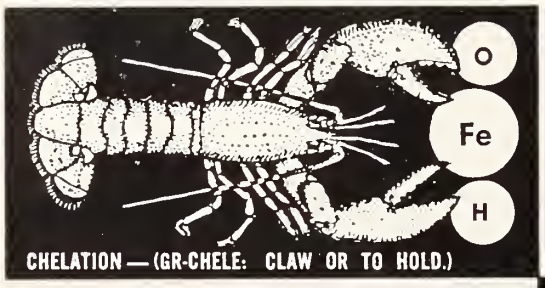
d. acute purulent untreated infections of the eye, which, like other diseases caused by microorganisms, may be masked or enhanced by the presence of the steroid. Purulent conjunctivitis and purulent blepharitis are not indications, but contraindications for topical steroid or steroid-antibiotic combinations. If conjunctivitis and blepharitis are listed as indications, they should be qualified as non-purulent, not purulent.

2. The following are two *important "side effects":*

a. extended use of topical steroid therapy may cause increased intraocular pressure in certain individuals. It is advisable that intraocular pressure be checked frequently;

b. in those diseases causing thinning of the cornea, perforation has been known to occur with the use of topical steroids.

All manufacturers of topical corticosteroid preparations and steroid antimicrobial combinations intended for ophthalmic use have been requested to revise the labeling and advertising of these preparations to include warnings concerning the above contraindications and side effects. ◄



The FIRST Hematinic to Contain BOTH CHELATED IRON and CHELATED MINERALS Assuring a Truly Flavorful, Better Tolerated Iron Therapy.

ADVANTAGES —
Chelated Iron PLUS 4 Chelated Minerals • High Therapeutic Effectiveness • Less Irritation — even on empty stomach • No Tooth Stain • Less Toxic • B-Vitamins for Added Hemopoietic Activity • Pleasant Flavor • Economical

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FORMULA —
Each 5 cc. (one teaspoonful) contains:

Iron (as Ferraus Betaine Citrate)	30 mg.
Cobalt (as Cabaltaus Betaine Citrate)	0.1 mg.
Manganese (as Manganese Betaine Citrate)	1.0 mg.
Zinc (as Zinc Betaine Citrate)	1.25 mg.
Magnesium (as Magnesium Betaine Citrate)	6.0 mg.
Vitamin B-1	1.5 mg.
Vitamin B-2	1.2 mg.
Vitamin B-12	6.0 mcg.
Niacinamide	10 mg.
Panthenol	10 mg.

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Annual Meeting Dates of Professional Medical and Allied Organizations

INDIANA STATE SOCIETY OF ANESTHESIOLOGISTS
Date May, 1964
Place Indianapolis

BONE AND JOINT CLUB
Date October 16
Place The Athenaeum, Indianapolis

INDIANA ACADEMY OF GENERAL PRACTICE
Date March 11-12, 1964
Place Murat Temple, Indianapolis

INDIANA HOSPITAL ASSOCIATION
Date October 23-25
Place French Lick, Indiana

INDIANA NEUROPSYCHIATRIC ASSOCIATION
Date Second Wednesday of every month, October through May
Place The Athenaeum, Indianapolis

INDIANA OBSTETRICAL AND GYNECOLOGICAL SOCIETY
Fall Meeting
Date November 13
Place Marott Hotel
Annual Meeting
Date January 15, 1964
Place Marott Hotel

INDIANA ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY
Date May 6-7, 1964
Place Marott Hotel, Indianapolis

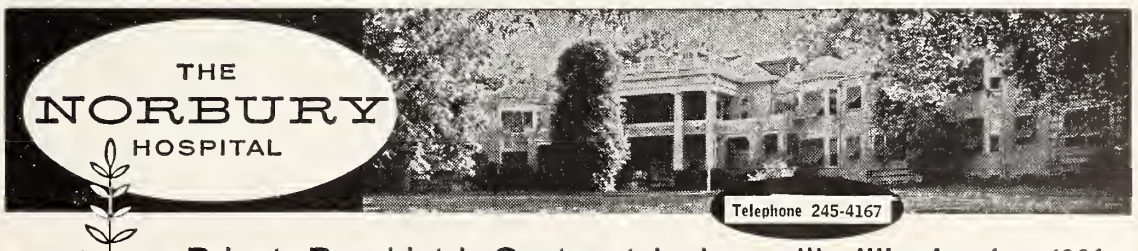
INDIANA ASSOCIATION OF PATHOLOGISTS
Date Dec. 1, 1963
Place Methodist Hospital
Fall Scientific Meeting
Date Sept. 21-22, 1963
Place I.U. Medical Center
Annual Seminar
Date May 17, 1964
Place Veterans Administration Hospital

INDIANA CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS
Date October 16
Place Indianapolis

INDIANA PHARMACEUTICAL ASSOCIATION
Mid-Year Meeting
Date January, 1964
Place Indianapolis

CENTRAL DISTRICT, INDIANA CHAPTER, AMERICAN PHYSICAL THERAPY ASSOCIATION
Date September
Place To be announced

NORTHERN INDIANA PSYCHIATRIC SOCIETY
Date Sept. 18
Place Beatty Memorial Hospital, Westville



a Private Psychiatric Center at Jacksonville, Illinois, *since 1901*

Complete psychiatric treatment in an environment for cure. A 60 bed hospital with the most modern diagnostic and therapeutic equipment for the treatment of nervous and mental disorders.

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Anesthesiology Postgrad Seminar Scheduled for 1964 in Miami Beach

The University of Miami and University of Florida Schools of Medicine announce the first annual postgraduate seminar in Anesthesiology to be held in Miami Beach on January 5-8, 1964.

The theme for the seminar is "The Cardiovascular system" and although the problems of this system in relation to anesthesia will be stressed, the subjects presented are of vital interest to all phases of medical practice. The program will consist of five panel discussions.

The panel participants will represent the medical specialities of internal medicine, surgery, pharmacology and anesthesiology. Additional information may be obtained by writing Frank Moya, M.D., Professor and Chairman, Department of Anesthesiology, University of Miami School of Medicine, Jackson Memorial Hospital, Miami 36.

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Cleveland Educational Foundation Sets Gastroenterology Course

The Cleveland Clinic Educational Foundation is offering a postgraduate course in Gastroenterology October 2 and 3 in Cleveland.

Due to limited auditorium capacity, registration will be limited to 125. For further information, contact the Education Secretary, Cleveland Educational Foundation, 2020 East 93rd St., Cleveland.

American Ob-Gyn Board Sets Date for Part I Written Exam

The next scheduled Part I (written) examination of the American Board of Obstetrics and Gynecology will be held at various examining centers in the United States, Canada, and military bases outside of the continental United States on Friday, December 13, at 2:00 p.m. Candidates eligible to take this examination will be notified on or about November 1st where to appear for examination.

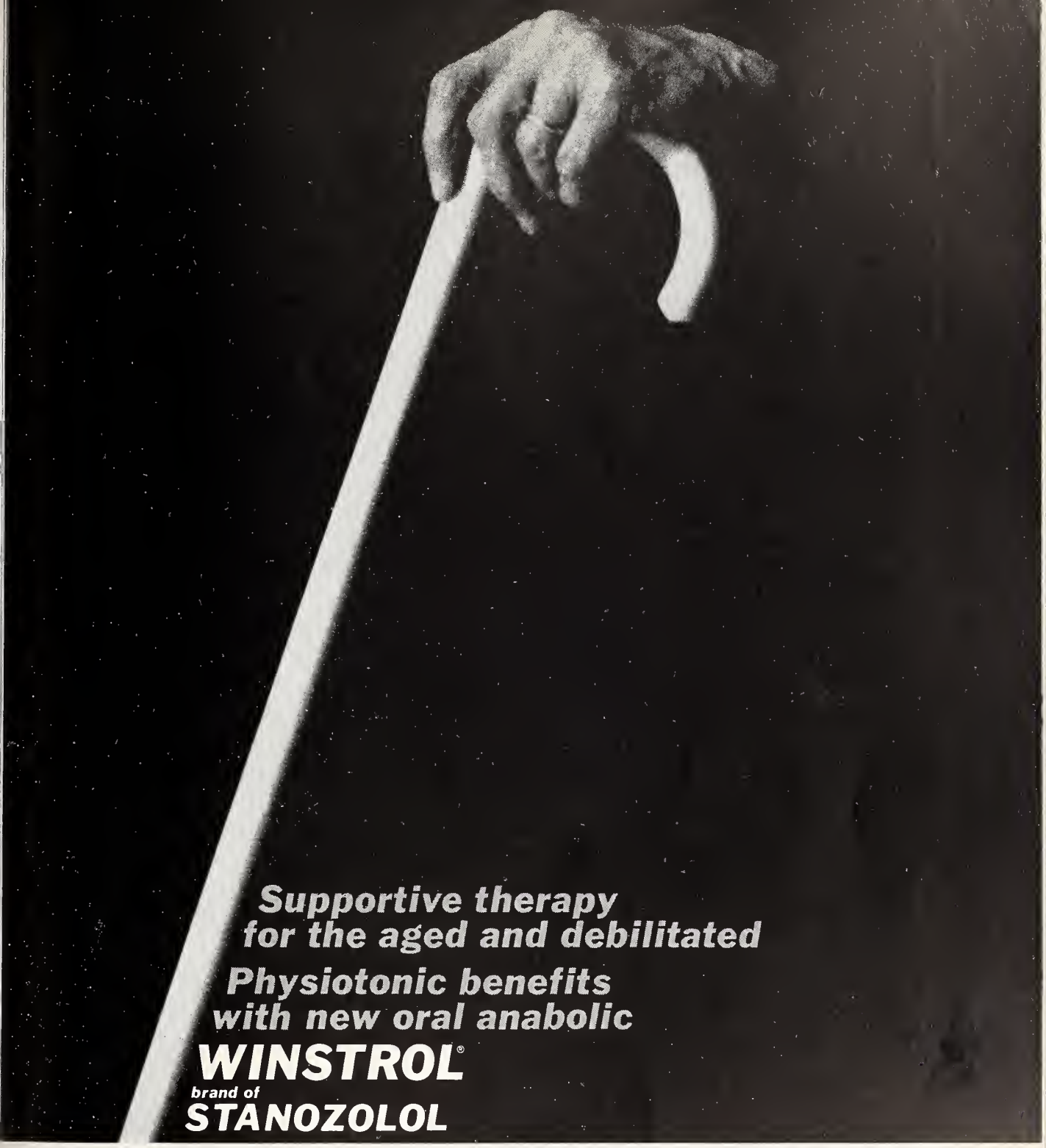
Part I examination (written), commencing in 1965, will be conducted in July at designated centers in the United States and Canada. Requirements, application, procedure, fees, etc., will be published in the 1964 Bulletin. Candidates whose residency will be completed on or before June 30, 1965 will be eligible to make application to take the examination in July, 1965.

The 1963 Bulletin of this Board is now available and prospective applicants are urged to request this brochure and thoroughly familiarize themselves with the current rules and regulations before making application. Bulletins may be obtained by writing to—Robert L. Faulkner, M.D., Executive Secretary and Treasurer, American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6.

Interstate Postgrad Association Offers Varied Program for GPs

The 48th annual Scientific Assembly of Interstate Postgraduate Medical Association, to be held at the Palmer House, Chi-

Continued



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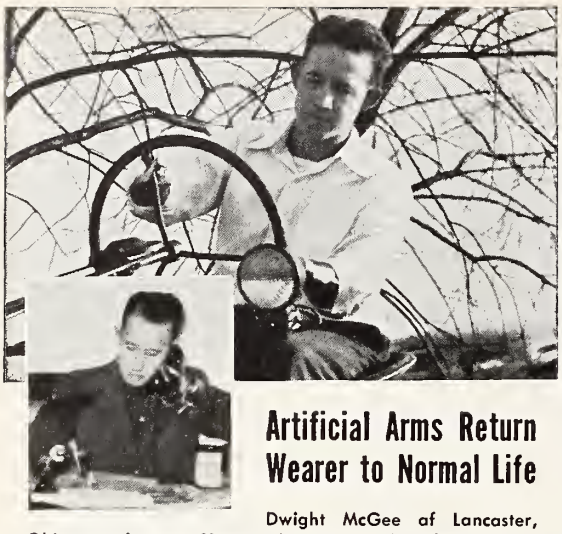
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Dosage: Usual adult dose, 1 tablet t.i.d. before or with meals; young women, 1 tablet b.i.d.; children (school age): up to 1 tablet t.i.d.; children (pre-school age): ½ tablet b.i.d. Available as scored tablets of 2 mg. in bottles of 100. For best results, administer with a high protein diet.

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FUTURES

Continued

cago, October 21-24, offers 19 and ¾ hours of varied teaching (and A.A.G.P. Category II credit) for a registration fee of $10.

The program is especially suited to the needs of generalists, as all lectures, panels and clinics are closely related to medical problems familiar to the physician who does not devote his time to a single specialty.

Those interested in full details of the program write to N. A. Hill, M.D., secretary, Interstate Postgraduate Medical Association, Box 1109, Madison 1, Wisconsin.

General Practitioners Offered Courses in Psychiatric Diagnosis

To meet the growing need for further training and experience in the areas of psychiatric diagnosis and treatment for general practitioners and physicians other than psychiatric specialists, basic and advanced courses will be offered by the Department of Psychiatry and Neurology of The Chicago Medical School.

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Open Psychiatric and consulting staff

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Courses will be offered on Wednesdays beginning in October, 1963. There is a limited enrollment, and advance registration is required.

Address communications to: H. H. Garner, M.D., Professor and Chairman, Department of Psychiatry and Neurology, The Chicago Medical School at Mount Sinai Hospital, 2755 West 15th St., Chicago 8.

Multiple Sclerosis Home Care Will be Topic of Conference

A conference on the home care of multiple sclerosis patients will be held October 26 at the Student Union Building of the Indiana University Medical Center, 1100 W. Michigan St., Indianapolis.

Dr. Alexander Ross, medical advisor for the Indiana chapter and Dr. Mark Dyken, medical director of the MS clinic at the medical center, will be in charge of the program.

Canadian-American Medical and Dental Ski Association Sets Meeting

The Canadian-American Medical and Dental Ski Association will hold its next meeting February 17-19, 1964, at Harbor Highlands, Harbor Springs, Mich.

For further information write T. J. Trepasso, M.D., 816 Ashmun St., Sault Ste. Marie, Mich.

Medical Assistants Association to Hold Convention October 9-13

The American Association of Medical Assistants will hold their seventh annual convention in Miami Beach October 9 to 13. The program will include an address by Dr. Edward Annis, and a panel review of mental health problems seen in the doctor's office. Dr. R. A. Royster of Evansville is one of the members of the AAMA advisory committee.

ISMA Members Invited to Attend Rocky Mountain Medical Conference

Members of ISMA are invited to attend the Rocky Mountain Medical Conference, October 30 to November 2, in Las Vegas, Nevada. The Conference is a joint enterprise of seven Rocky Mountain states and will feature 16 nationally known physicians. A registration fee of $20 which includes a luncheon will be charged. More details may be obtained by writing Dr. Thomas S. White, 3660 Baker Lane, Reno, Nevada. ◄



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INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—July, 1963

Disease	July 1963	June 1963	May 1963	July 1962	July 1961
Animal Bites	833	1036	1029	895	778
Chickenpox	58	244	758	84	61
Conjunctivitis	44	46	77	78	49
Diphtheria	2	0	0	0	0
Dysentery, Unspecified	6	70	111	15	1
Gonorrhea	289	245	233	Not Available	
Impetigo	78	63	75	138	39
Infectious Hepatitis	25	40	81	50	98
Infectious Mononucleosis	8	21	31	8	12
Influenza	90	88	240	197	149
Measles (Rubeola-Rubella)	241	377	1556	253	142
Meningitis, Meningococcal	2	5	3	0	1
Meningitis, Other	7	4	12	7	4
Mumps	101	244	519	139	127
Pertussis	102	29	29	33	12
Pneumonia	60	85	154	95	62
Poliomyelitis	0	1	1	1	1
Streptococcal Infections	132	241	565	259	129
Syphilis					
Primary and Secondary	6	7	6	Not Available	
All Other Syphilis	114	103	111	Not Available	
Tinea Capitis	2	2	8	3	2
Tuberculosis (Active)	110	107	193	100	90



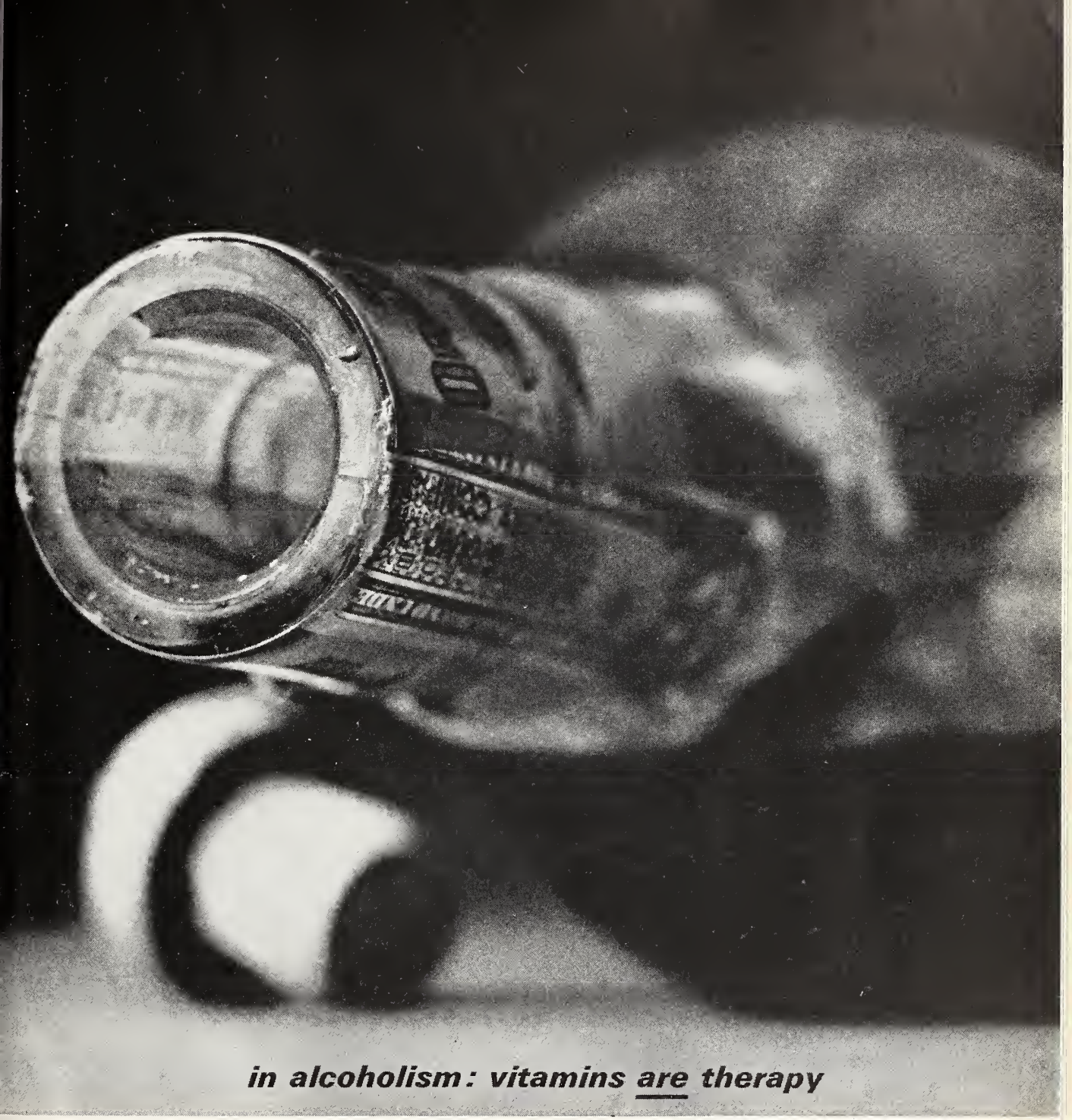
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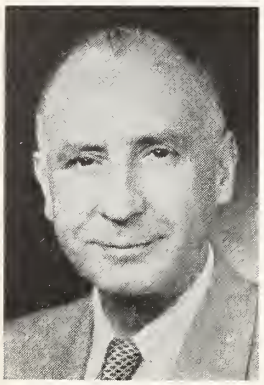
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Deaths

ISMA Loses Beloved Friend in Passing Of Dr. Walter L. Portteus, Former President

Dr. Walter L. Portteus, former president of ISMA and long-time active member of the association, died August 18 at Johnson County Memorial Hospital.

Dr. Portteus, 63, was ISMA president in 1955, capping a life of long service to the association. Secretary of the Johnson County Medical Society for 12 years, Dr. Portteus was a delegate for many years, member of the Council for four years and member of the Executive Committee for eight years.



A graduate of the Indiana University Medical School in 1924, Dr. Portteus practiced in Franklin. He served on the ISMA committees on postgraduate study, graduate education, secretaries conference, advisory committee to the Bureau of Maternal and Child Health of the Indiana State Board of Health and the Committee on Prepayment of Medical and Surgical Care.

He also served on the following committees: school health and physical education, AMA campaign coordinating committee, preceptorship, anti-national health insurance, constitution and by-laws, publicity, grievance, the liaison committee with labor, the Indiana inter-professional health council and the Commission on Legislation.

He was an alternate delegate to the AMA for three years and was elected AMA delegate in 1961 for a two-year term.

Dr. Portteus also served as secretary on the Blue Shield board since the beginning of the company in 1946 and served on the executive committee of the board. He became president of Blue Shield in 1962.

His affiliation with state and national organizations include serving as chairman of the Medical Advisory Committee, Sears-Roebuck Foundation; advisor to the United States Public Health Service; on the Economic Security Committee of the United States Chamber of Commerce; on the first Indiana Council on Mental Health through two administrations; on the planning committee for the White House Conference on Children and Youth and as a member of the Blue Shield Commission, a national organization.

His devotion to his patients, his friendly smile and his dedicated service to ISMA will long be remembered.

Maude Arthur, M.D.

Dr. Maude Arthur, Daviess County's first woman doctor, died June 28 in her home near Washington, Ind. She was 84.

A graduate of Indiana Medical College in 1907, Dr. Arthur was a member of the ISMA 50-Year-Club and the Daviess-Martin County Medical Society.

James F. Balch, M.D.

Dr. James F. Balch, past president of the St. Vincent's Hospital Medical staff, died July 18 aboard the S. S. Argentina in the North Sea while on a Scandinavian cruise.

Dr. Balch, 60, was a specialist in urology and clinical professor of urology at the I. U. School of Medicine. A 1928 graduate of I. U., Dr. Balch was past chairman of the urology sections at General and St. Vincent's hospitals and a consulting urologist at Methodist, General, Community and Ft. Harrison hospitals. He was a member of the Marion County Medical Society.

Earl B. Jewell, M.D.

Dr. Earl B. Jewell, radiologist and pathologist at Logansport hospitals for 24 years, died July 11 in Troy, Mich. He was 81.

Dr. Jewell went to Logansport in 1938 as roentgenologist and pathologist at Me-

morial and St. Joseph hospitals. He joined the staff of the state hospital in 1955, served the Wabash Valley Sanitarium, Lafayette, in 1956, and returned to the state hospital staff in 1957, remaining there until his retirement.

A past president of the Cass County Medical Society, Dr. Jewell was made a member of the ISMA 50-Year-Club in 1957.

Joseph A. Teegarden, Sr., M.D.

Dr. Joseph A. Teegarden, Sr., 82, a pioneer physician in the Calumet region, died June 22 in his home.

A member of the ISMA 50-Year-Club, Dr. Teegarden went to East Chicago in 1904 after his graduation from Rush Medical College. He was a member of the staffs of St. Margaret Hospital, Hammond, and Methodist Hospital, Gary, and joined the staff of St. Catherine Hospital, East Chicago, when it was established in 1928. He was the first secretary of St. Catherine's and later served as its president. He was a member of the Lake County Medical Society. ◄

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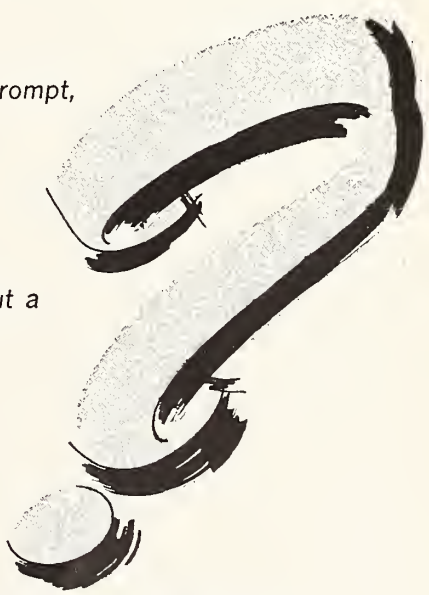
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THE COUNCIL

July 14, 1963

The Council of the Indiana State Medical Association convened for its summer meeting at 10:00 a.m., Sunday, July 14, 1963, in the headquarters building, 3935 North Meridian Street, Indianapolis, with Dr. Kenneth O. Neumann, chairman, presiding.

Roll call showed the following present:

Councilors:

First District—P. J. V. Corcoran, Evansville
Second District—E. T. Edwards, Vincennes
Third District—John M. Paris, New Albany (also AMA alternate delegate)
Fourth District—Joe M. Black, Seymour
Robert M. Reid, Columbus, alternate
Fifth District—V. Earle Wiseman, Greencastle
Sixth District—William R. Tindall, Shelbyville
Seventh District—Albert M. Donato, Indianapolis
Eighth District—Gordon B. Wilder, Anderson
Paul Sparks, Winchester, alternate councilor-elect
Ninth District—Kenneth O. Neumann, Lafayette
Albert E. Stouder, Kempton
Tenth District—Not represented
Eleventh District—E. S. Rifner, Van Buren
Twelfth District—Milton F. Popp, Fort Wayne
William R. Clark, Fort Wayne, alternate
Thirteenth District—Jene R. Bennett, South Bend

Officers:

Maurice E. Glock, Fort Wayne, president
Ottis N. Olvey, Indianapolis, assistant treasurer

Journal:

Frank B. Ramsey, Indianapolis, editor, *The Journal*

Executive Committee:

Wendell E. Covalt, Muncie, chairman

Guests:

Harold C. Ochsner, Indianapolis, AMA delegate
E. S. Jones, Hammond, AMA delegate
Francis L. Land, Fort Wayne, AMA delegate
Jack E. Shields, Brownstown, AMA delegate
William B. Challman, Mount Vernon, AMA alternate delegate
John D. VanNuys, Indianapolis, dean, I. U. School of Medicine
Lester D. Bibler, Indianapolis, AMA Trustee, and chairman, Committee on Student Loan
William J. Stangle, Bloomington, chairman, Professional Advisory Committee of Blue Cross
Philip B. Reed, Indianapolis, chairman, Grievance Committee
Harry Klepinger, Lafayette, chairman, Commission on Medical Education and Licensure
George T. Lukemeyer, Indianapolis, I. U. School of Medicine
John B. Hickam, Indianapolis, I. U. School of Medicine
Glen Ward Lee, Richmond, Commission on Governmental Medical Services

Staff:

Robert Hollowell, attorney
Robert J. Amick, field secretary
J. A. Waggener, executive secretary

On motion of Drs. Popp and Wilder, minutes of the meeting held April 28, 1963, were approved as printed in the July, 1963 *Journal*.

The Council stood for a moment in memory of Dr. Harry R. Stimson of Gary, president of the Indiana State Medical Association in 1962, who died June 30, 1963.

Reports of Councilors

The councilors reported on their respective spring district meetings.

DR. PARIS, Third District, spoke of the criticism he had heard from members in his district concerning the action of the State Board of Medical Registration and Examination in discontinuing reciprocity with fourteen states which do not conform to Indiana examination standards, and the discontinuance of issuance of temporary medical licenses, effective July 1, 1963.

DR. WISEMAN, Fifth District, announced that the Fifth District would hold its annual meeting at Cataract Lake, September 25.

DR. WILDER, Eighth District, announced that a new councilor, Dr. Donald R. Taylor, Muncie, was elected at the Eighth District meeting on June 15.

DR. RIFNER, Eleventh District, reported that at its spring meeting at Delphi, the Eleventh District rescinded the rule that the district shall hold two meetings a year, and beginning in 1964 the district will hold only one meeting per year and that will be a fall meeting. He announced that the next Eleventh District meeting will be held in Marion on the third Wednesday of September.

DR. POPP, Twelfth District, reported that his district met in conjunction with the AAGP on May 22, with a good attendance and a good scientific meeting.

DR. BENNETT, Thirteenth District, announced that his district would meet September 18 at Elkhart. He discussed the matter of suggestions to the president-elect for appointments to commissions for 1963-64 and the fact that valuable commission members are lost by the rule that a man who has served two terms on a commission is not eligible for reappointment. Dr. Bennett asked if there is a possibility of modifying this rule, thereby retaining experienced and valuable members on the various commissions.

The chairman called attention to conflicts in meeting dates already selected for 1964 district meetings and asked that the councilors attempt to avoid these conflicts. The Third, Fourth and

Twelfth Districts have set May 20, 1964, for their spring meetings.

Matters Referred to Council by Executive Committee

1. *Use of headquarters building by other groups.* Drs. Covalt, Popp and Glock discussed this matter. **On motion of Drs. Popp and Edwards, the Council approved the suggestion of the Executive Committee, that is, that the Building Committee set up rules governing the use of the building by paramedical groups and present these recommendations to the Council for approval.**

2. *Annual convention program.* Dr. Covalt spoke of the impressive program on "Americanism" which the Conference of Presidents put on at Atlantic City in June and reported that the Executive Committee, at its meeting on July 13, had suggested that the two general scientific meetings scheduled for one and 3:30 p.m. on Wednesday, October 16, could be run simultaneously at 1:30 Wednesday afternoon and the Americanism program could be set for 3:30 p.m. Wednesday. Speakers appearing on this program would be Walter Petravage, manager of the Public Affairs Department of the United States Chamber of Commerce, Washington; Congressman Donald C. Bruce, and Dr. Nicholas Nyaradi, director of International Studies, Bradley University, Peoria, Illinois, and formerly Minister of Finance, Republic of Hungary.

On motion of Drs. Edwards and Glock the Council voted to adjust the convention program to make it possible to present the Americanism program.

3. *Resolution on Realignment of Dues Structure.* Dr. Covalt read the following resolution which is to be presented to the House of Delegates by the Delaware-Blackford County Medical Society:

WHEREAS, Indiana State Medical Association has for the past twelve years supported a program of assistance to Indiana University School of Medicine through the National Fund for Medical Education and/or the American Medical Education Fund, and

WHEREAS, the approximate amount for the past few years has remained static (about $35,000 annually) because it is a compulsory portion ($10.00) of our dues structure, and

WHEREAS, the basis of this grant was intended to be judged upon the need, and

WHEREAS, funds from other sources, particularly the Federal Government, are increasingly available and administratively acceptable to the medical school, and

WHEREAS, Indiana State Medical Association has a Student Loan program which can be made much more effective if sufficient funds were made available,

NOW THEREFORE BE IT RESOLVED, that that amount of our dues structure which is now used to provide funds for American Medical Education Fund through compulsion, be retained in our dues structure but be used to provide necessary funds for an adequate Student Loan program as well as support for the general fund instead of being donated to American Medical Education Fund. That all contributions to American Medical Education Fund be on a voluntary basis and in addition to and outside of the dues structure.

Following discussion by Drs. Covalt, Paris, Glock, Bennett, Rifer and Edwards, **on motion duly made and seconded the Council voted to table any Council action on this resolution.**

4. *Program of AMA Department of Medicine and Religion.* Dr. Covalt reported that the Executive Committee, at the request of the Council, had discussed the matter of assigning the responsibility of implementing the program of the AMA Department of Medicine and Religion to one of the commissions and had decided that this should be an activity of the Commission on Inter-Professional Relations.

On motion duly made, seconded, put to vote, and carried, the Council accepted the recommendations of the Executive Committee as changed by the Council.

Reports of Officers

DR. MAURICE E. GLOCK, president: Thank you very much. I am sorry to take so much of your time. I will make it brief. I would like to brag about the delegates and the alternate delegates we have to the AMA. They did a marvelous job. They worked hard and diligently; they were effective, and I am real proud of them. We got our ears pinned back at New York a couple of years ago when we tried to get some things through. I think we learned. We had wonderful leadership in Dr. Jones, who ran our delegation over there. They cooperated with one another. I think all the items we were interested in we won, except for one. I will talk about that briefly.

As you all know, Lester Bibler was elected to the Board of Trustees of the AMA. It is going to be a real hard job and I know he is going to work hard at it. He sent me a note and asked me to thank the rest of the Indiana delegation for their support. He is at a meeting in Chicago today and if he gets through in time he is going to try to get in on the tail-end of this meeting. I expect we will be real critical of Lester in the years to come because these people can't satisfy every one. I think with a broader base of the Board of Trustees, we will have a little better luck with our relations with the AMA.

Dr. Frank Land realized one of his pet ambitions, and I think one of the pet ambitions of the Indiana State Medical Association, when he was named to the Council of Medical Education. This has been a sore spot for many years because the rank and file membership of the AMA have felt that they were not represented on this important council and Francis Land is the representative of the rank and file doctor of, not only Indiana,

but the entire United States. I want to say this to you right now, Frank, take this charge real seriously. One of the AMA full-time staff men came around to Frank after the meeting and said, "You know, Frank, this isn't bad at all, looks like there is an awful lot of work here but you only have to attend three meetings a year—you come to the interim session, you come to the AMA, and we might have another meeting, and really all the work is done for you." And this is what has been wrong with that council, Francis;—have more meetings and don't let these staff men settle all the problems.

Now this brings me to another thing that is very near to my heart and this is the thing that the AMA Board of Trustees did to you and me and to the AMA-ERF Fund. They announced in the New York papers and in the *AMA Daily News*, before there was any action by the House of Delegates, that the AMA was going into basic research; they had a big sum of money, $40,000.00 —that they could put into a very basic research program that would find all the vital secrets of life. I mentioned this to the dean of our state medical school and said, "What could you do with $40,000.00?" and he said, "I'd be overwhelmed." And this brings us back to what the federal government is pouring in—$73,000,000.00—to the National Institute alone. We can't compete with them on a financial basis. But this was done without bringing it to the floor of the House of Delegates for a vote. John Paris caught this. John attended the meeting of the Reference Committee on Reports of Officers which had the report of the Board of Trustees. The Board of Trustees of the AMA, for some unknown reason to me, are also the Board of Directors of AMA-ERF—they said we are putting money into this and we are going to do this. Since AMA-ERF is a separate organization, legally, they could do this. They don't come and consult with the House of Delegates—and this happened to many other things that Drs. Ochsner, Land and Jones and the rest of them can tell you. The delegates do a good job, but by golly we get hornswoggled. The reference committee slapped them a little on the wrists and said you really should come to us when you are changing policies and so on in the future but in essence approved the research program of AMA-ERF. And this is one reason I, as an individual, would support almost anything that would put money into helping medical education that would not go through the hands of the AMA or the AMA-ERF, because if you don't have that pinned down exactly where you want, you might find you are supporting some basic research in the basement of 535 North Dearborn St.—that to me is very questionable. They are going to get this started with $40,000.00 but they have to get additional money. Now, are we going to be embarrassed, as members of the AMA and of the Indiana State Medical Association, by having some of these men go and ask for federal funds to support a program that the AMA has started? Let's give this a little thought.

There is another thing that happens with the AMA and I get real disturbed about it. I had a letter, dated June 21, from Bing Blasingame that states they are informing the presidents and the executive secretaries of the constituent component medical societies that a new commission has been formed by the American Public Health Association and the National Health Council and the AMA is to work with this group. It is called the National Commission on Community Health Services and the AMA is to cooperate with these people. You know who they managed to hire as their executive secretary—nobody else but Marion B. Folsom. Yes, this is what the AMA is doing to us. They are cooperating with the council and with these groups who go out and hire Folsom, who as all of you know, was working for Mr. Eisenhower, as the Secretary of Health, Education and Welfare, who bombed us when we went to the President's Conference on Aging. He set us up as patsies. This man is extremely liberal—I don't care whether he was Eisenhower's secretary or not—and we are to work with these people—and we have to give them some leadership.

Here are the people who are on the national commission—Marion Folsom, and he is going to be the chairman; Doctor of Public Health, James Curtain, who is the managing director of the National Tuberculosis Association, Joseph Beasley, of the Equitable Life Insurance Society, T. H. Hardin Branch, who is President of the American Psychiatric Association, Leroy Burney, who is Vice-President of Health—of Temple University—down the list, Edwin Crosby, here is a good one, Executive Vice-President and Director of the American Hospital Association, another one of our true friends—Milton Eisenhower, president of Johns Hopkins University, a fine man, but I wonder just how much he has his feet on the ground—Boisfeuillet Jones, Secretary of the Department of Health, Education and Welfare.

Our own Indiana State Commission on Voluntary Health Agencies did a smashing job in the last two years in trying to bring some order out of chaos on these voluntary health agencies. Norm Booher appeared before the Shipman Committee of the AMA and gave them the data we had and this Shipman Committee in turn brought in a report to the AMA that watered down the whole proposition. They didn't want to do anything, they didn't want to have anything to do to regulate or to set up rules of these voluntary health agencies—they just pulled the rug out from under our state commission. Fortunately, this report was not accepted by the AMA and it is being held over for a meeting in August, in Chicago, during the public relations meeting.

Treasurer's Report

In the absence of the treasurer and the assistant treasurer, the Council reviewed the printed financial statements which were presented to them.

On motion of Dr. Paris, duly seconded, the Council accepted the treasurer's report as printed.

DR. FRANK B. RAMSEY, editor of *The Journal*: I call your attention to Exhibit D in the financial report. Our revenue is running about $3,000.00 ahead of what it should at the three-quarter pole and the printing bill is running about $3,000.00 less than we thought it would at this time. Actually, we are $5,500.00 ahead of even and $7,800.00 ahead of the budget. This isn't quite as good as it sounds because we have a large number in September, the Convention issue, which is about as expensive as the Roster issue. The printing bill on the Roster issue this year was almost $6,000.00. Usually we have printing bills around $3,500.00 to $3,800.00 so that is as nearly as I could predict now. I would think we would come within the budget and maybe break even this year.

Report of AMA delegates. DR. E. S. JONES, chairman of the Indiana delegation, DR. HAROLD C. OCHSNER, DR. JACK SHIELDS, DR. FRANCIS LAND and DR. WILLIAM CHALLMAN spoke on actions taken by the American Medical Association House of Delegates at the annual convention held at Atlantic City, June 16 to 20, 1963. (For complete report, see pages 1046-1049, August, 1963, *Journal.*)

Dr. Land reported particularly on the resolution introduced by Indiana three years ago which requested that a committee be appointed and that this committee recommend rules and regulations concerning out-patient departments in internship training. Dr. Land said: "Apparently the letter was lost, and this went on for a couple of years; finally a committee was appointed a year ago. I happened to serve as chairman of the committee since it was an Indiana resolution. We brought in our recommendations to the House of Delegates this year, and these recommendations state quite specifically, you are not required to have an organized out-patient department to have an internship training program.

You may have an organized emergency room service, you may have a preceptorship service or an organized out-patient department. Many areas have been questioning this. Ball Memorial Hospital has been placed on probation for failure to have an organized out-patient department. Now this committee's report clearly spelled out that this was not necessary. It was approved by the House of Delegates, but this is not reported in the actions taken by the AMA House. . . . There is not a word mentioned anywhere that it had ever been brought out. . . . Well, this is another typical instance of what happens. This was a clearcut decision by the House of Delegates, which was overwhelmingly approved. There was not one word spoken against this report."

DR. LESTER D. BIBLER, newly elected member of the AMA Board of Trustees, thanked the officers and AMA delegates for their efforts in behalf of this election, and asked for suggestions in fulfilling his office.

Reports of Guests

1. DR. WILLIAM J. STANGLE, chairman of the Professional Advisory Committee of Blue Cross, brought the following matters to the attention of the Council:

(a) In the direct-pay policies, Blue Cross has instituted a sliding schedule whereby the policy holders by paying a little more get a greater allowance on their room. This is comparable to what policy holders in the group type get. Formerly it was a standard of $12.00 per day. Now, by increasing the premium payments, the individual policy holder can get up to $18.00 a day.

(b) A proposed change in the Articles of Incorporation reading: "To enter into contracts of insurance and issue Membership Certificates providing for the payment of hospitalization expenses, illness expenses, and any and all other health care expenses."

Dr. Stangle said the medical members of the Blue Cross Board definitely are not in favor of this change. Action on this will not take place until the annual meeting in March, 1964.

(c) In non-participating hospitals the fee which previously had been $9.00 has been increased to $12.00, with the extras remaining the same. It is felt this can be done without any appreciable increase in rates.

(d) Analysis of hospital costs, as given at the June meeting of the Blue Cross Board:

> In May the average cost per case was $259.52 as compared to $271.59 in April and $245.51 in May a year ago. The increase of $14.00 over last year is primarily because the length of stay is getting a little longer all the time. "As long as the stay continues to gradually go up and labor costs increase, the average cost per case will increase," Dr. Stangle said. "If you can get your patients out a little faster, this will help to keep the rates down."

The above matters were discussed by Drs. Popp, Edwards, Stangle, Glock, Land and Paris. Dr. Stangle said that he is quite aware of the fact that the Council is unhappy with the proposed revision of the Articles of Incorporation of Blue Cross and he thinks something can be done about this. The physician members of the Board would appreciate the help of the councilors.

2. DR. JOHN D. VAN NUYS, dean, I. U. School of Medicine, spoke on:

(a) The slowdown, and, in some cases, actual stoppage of certain activities at the university because of the ruling of the Marion County Court on the state tax situation. The lack of necessary revenue means no new staff additions, no replacement of staff that leaves during the next six months' period, no new construction begun.

(b) Increase by $200.00 in in-state student fees, by order of the state government in conjunction with the State Budget Committee.

(c) Total budget for the School of Medicine for the last year is seven million dollars. About one-

third of the School of Medicine's income comes from state tax sources.

(d) The new Riley Hospital addition will be ready for occupancy in less than a year.

(e) Plans for the new university hospital have been completed. When new tax sources are available, bids will be called for.

(f) The Admissions Committee has accepted 210 students and 10 alternates for the September, 1963, class, which will be the largest class in the history of the school, and probably the largest class in the country.

(g) The Executive Committee has adopted a plan for freshman counseling. This will not be compulsory.

3. DR. JOHN B. HICKAM, Chairman of the Department of Medicine, Indiana University School of Medicine, spoke briefly of the idea he had proposed to Dr. Van Nuys to provide for senior students on an elective basis an experience in general practice in lieu of a portion of their regular senior course in medicine. The current senior course in medicine being taken at Long, Marion County General and Veterans Administration Hospitals consists of 6 weeks of in-patient service in one of the hospitals and 6 weeks of out-patient service. It is proposed that students in the upper two-thirds of their class be given the option of spending the 6 weeks ordinarily devoted to out-patient medicine with a general practitioner under a preceptor program. At present this would not be feasible for more than 1/6 to 1/4 of the class because of scheduling problems. The Department of Medicine would want to have a report from the practitioner preceptor evaluating the student's performance and also a letter from the student as what his experience had been. After a period of time the program could be evaluated as to its usefulness.

Dr. Rifner said that the state medical association, through the Commission on Public Health, had been working for this type of program for a long time.

Dr. George Lukemeyer reported that 28 out of 153 students took straight internships this year; 128 took rotating internships.

Dr. VanNuys stated that the preceptorship program which ran for four or five years several years ago, was not successful since it was too long, was limited to the Marion County area because many of the students were married and had established homes in this area, and it had to be taken during the student's free time rather than in a regular course in which he gets credit. "I think this will be the angle," Dr. VanNuys said, "that will make it a success. At least we are willing to give it a good try, and I wanted Dr. Hickam to give it to you directly, as coming from him and the members of his department. If you have any discussion on what group in your organization we should work with, rather intensively, we are willing to go ahead and implement this, beginning with the September course."

In answer to the question, "Is anything being done about rotating internships?" Doctor VanNuys said, "We have straight internships at the university and rotating internships at General and other Indianapolis and Indiana hospitals. We think this is working out quite well, and our department feels that this is the ideal situation for the university, inasmuch as the type of material which we have at the university is not exactly the ideal material for rotating interns. It is a referred practice, very high percentage of problem cases. Almost all of the students who come for internships, not only in our university hospital but in almost every other university hospital, clearly have in mind some kind of a specialty practice. It certainly does not mean that we are against rotating internships. It means, however, that these few students of ours who wanted straight internships prior to this had to leave the state of Indiana to get them."

Dr. Hickam reported that 28 out of 153 students took straight medicine internships this year; 128 took rotating internships.

4. DR. HARRY KLEPINGER, chairman, Commission on Medical Education and Licensure, reported that his commission had considered a number of projects during the year but had concentrated particularly on the following four areas: (1) The shortage of general practitioners; (2) the postgraduate or continuing education problem in Indiana; (3) the mutual problems of the teaching and the practicing profession, and (4) an increased contact with medical students to learn more of their problems.

In addition to discussing these subjects, Dr. Klepinger spoke of the excellent Junior-Senior Day program held in March and sponsored by the Rural Health Committee of the Commission on Public Health. He also reported that his commission has not been too enthusiastic about the National Science Fair, which the state association has sponsored in a financial way for a number of years in the past, and on making a survey of principals of some of the leading high schools, the commission found that they too are not too enthused with science fairs.

5. DR. GEORGE T. LUKEMEYER, chairman of the House Staff Committee, Department of Medicine, I. U. School of Medicine, discussed the admission policy and the work of the Admissions Committee, and the postgraduate program at the university.

Dr. Glock spoke of the fact that Fort Wayne Lutheran Hospital has five recent I. U. graduates on rotating internships and these men reflect the high type of student being graduated from the School of Medicine. He also mentioned the favorable contact which the medical profession has with the medical school.

Dr. VanNuys said the university gets a few good applicants from the small towns but the numbers are steadily decreasing. The feeling is that students are not being stimulated at the high school level in the smaller schools as they are in some of

the larger high schools. The difficulty is that the areas that need physicians are not producing the applicants, and statistics show that a great percentage of graduates go back to their home communities to practice. "I don't mean to indicate that we don't find them qualified—we just don't find them stimulated—they just don't put in any applications. We are not against the small town boy, we are looking for him, but somewhere along the line they don't get the stimulation. And I think organized medicine can help in this respect in some of the high schools that are not stimulating some of their students to study medicine."

DR. JACK SHIELDS told of the action of the House of Delegates of the Student AMA in accepting loans from the government without interest, and stressed the importance of the medical profession having closer liaison with medical students.

6. DR. PHILIP B. REED, chairman of the Grievance Committee, reported that the procedure instituted by the committee some years ago has remained essentially unchanged and has materially decreased the number of complaints that are adjudicated at the state level. (See annual report of Grievance Committee, page 1173, September, *Journal*.)

Dr. Reed also reported in detail on a case pending with his committee which involves the release of patients' records to other physicians, inasmuch as the physician in question has moved to another part of the state. This was discussed by Drs. Corcoran, Popp and Donato, and **on motion duly made and seconded, the matter was referred back to the Grievance Committee.**

Dr. Reed brought to the attention of the Council the practice of psychotherapy by persons untrained in medicine. Dr. Reed said, "Most of these people are in the allied health professions or services and are pretty well covered by the McKeown report which was adopted by the AMA House of Delegates in June, 1960. Because we in medicine cannot dictate or legislate the ethical code of nonmedical groups, and second, as we know that any attempt to introduce any new legislation in Indiana threatens to open the Indiana Medical Law to amendment that could well be deleterious to medicine, the Grievance Committee wishes to recommend a different approach." Here Dr. Reed outlined the principles contained in the McKeown report and the procedure recommended by the Grievance Committee to be followed by county medical societies in approaching this subject. **On motion by Dr. Edwards, duly seconded, the Council asked Dr. Reed to report this matter to the House of Delegates at the October meeting.**

Matters from Committees and Commissions

1. *Student Loan Committee.* The report presented in writing to each councilor was discussed by Dr. Paris and Mr. Hollowell. No action was taken.

2. *Council Ad Hoc Committee with Indiana Hospital Association.* (Composed of Drs. Edwards, George Willison, R. James Bills, Lowell Thomas and C. Powell VanMeter.) Dr. Edwards reported that the committee had submitted the suggested procedure for the transfer of payments for all doctors' professional services from Blue Cross to Blue Shield (approved by the Council at its April, 1963, meeting and also by the Indiana radiology and pathology societies) to each hospital administrator, each hospital medical staff president and each county medical society president. A postal card was enclosed asking for a reply from the hospital administrator if he envisioned any particular problems. Cards have been received from certain cities and towns (at the insistence of the IHA), saying the hospitals cannot do anything locally—it will have to be done by the Indiana Hospital Association. The Indiana Hospital Association at the March meeting said it couldn't do anything—it had to be done locally.

For the information of the Council, Dr. Edwards read a letter which he had received from the Executive Director of the Indiana Hospital Association requesting the Ad Hoc Committee to "refrain from directly contacting our member hospitals until the agreed organized approach is carried out. We officially inform you of our willingness to again meet to objectively consider this matter. We did not submit any recommendation from our meeting with you to either the Blue Cross Advisory Council, the Blue Cross Board, or the Indiana Hospital Association Board."

Dr. Edwards also read his reply to the Hospital Association in which he stated that Resolution No. 12, adopted by the House of Delegates in October 1962, authorized the sending of a copy of that resolution to each member hospital. The letter also states: "The Ad Hoc Committee considered that the paper prepared for your committee would be more informative than the resolution itself."

Dr. Edwards asked that the two field men, as well as the councilors, contact local county medical leaders and ask them to exert their influence on hospital board members and urge them to approve this transfer.

Discussed by Drs. Paris, Black, Popp, Bennett, Glock, Ochsner and Edwards.

Dr. Edwards moved "that the Council direct the executive secretary to assign the field men to carry the information and urge active local county society participation in carrying out the objectives of the Ad Hoc Committee." Motion duly seconded, put to vote, and carried.

3. *Commission on Legislation.* Dr. Black, chairman, reported on national legislative matters.

4. *Commission on Public Information.* To maintain more contact with the county medical societies in an effort to obtain "grass roots" support in legislative and public relations programs, the Commission on Public Information asked permission of the Council for one of its members to be given not more than five minutes' time at each of the district meetings to discuss the work of the com-

mission. **On motion duly made and seconded this request was granted.**

5. DR. GLEN WARD LEE, Commission on Governmental Medical Services, reported that the state of Indiana is creating a new Commission for Planning on Mental Health, the membership to be composed of every type organization interested in the mental health field. From this commission there will then be task forces created in the counties to study the mental health problems and to recommend what can be done to improve mental health care. The new concept is that the mentally ill are not ideally taken care of by being rushed into the state mental hospitals, but rather, they would be better taken care of at an earlier stage, when the patient is in the acute mentally disturbed state, at a local level rather than in an institution. The Joint Steering Committee, composed of five members each from the State Medical Association, the two branches of the State Psychiatric Association and from the State Mental Health Asociation, has been asked by Dr. Ginsberg to act as an Advisory Committee to this commission. The five members on the Steering Committee from the state medical association are: Drs. Lee, who has served as chairman in the past, Norman Booher, Stewart Ginsberg, John Nurnberger, and Nathan Salon. Due to the fact that the Steering Committee has been working together for more than a year and a half, Dr. Ginsberg would like to have the Joint Steering Committee re-designated as an Advisory Committee to the Commission for Planning on Mental Health. Dr. Lee asked for approval of the Council of this committee and the entire Joint Steering Committee.

On motion duly made and seconded this approval was granted.

Dr. Lee announced that the Joint Steering Committee was planning to hold five or six regional meetings, in line with the AMA's recommendation that the members of the medical profession take the leadership in the fields of mental illness and health, and interest themselves in seeing that they are in on any committee in any local community that is trying to establish a clinic or any thing of that sort, so these groups can be properly oriented. Dr. Lee asked that the councilors urge their component county medical societies to send representatives to these meetings.

Economic and Organization Matters

1. *Nominations for Editorial Board* to replace two Editorial Board members whose terms will expire December 31, 1963, were deferred until the next meeting of the Council.

2. *Trust Committee of Indiana Medical Education Foundation.* **On motion duly made and seconded, Drs. Don E. Wood, Indianapolis, and Roy Geider, Indianapolis, were elected to succeed themselves as members of the Trust Committee of the Indiana Medical Education Foundation for the three-year term ending October 31, 1966.** Membership of this committee for the ensuing three years is as follows:

	Term Expires
James W. Denny, Indianapolis	October 31, 1964
Loren H. Martin, Indianapolis	October 31, 1964
Maurice V. Kahler, Indianapolis	October 31, 1965
Lawson J. Clark, Indianapolis	October 31, 1965
Don E. Wood, Indianapolis	October 31, 1966
Roy Geider, Indianapolis	October 31, 1966

3. *Nominations of two Blue Shield Board members-at-large,* to be made by the Council, to replace two members whose terms will expire March, 1964, were deferred until a later Council meeting.

Dr. Donato reported that Dr. Glen V. Ryan, Indianapolis, had been renominated for his position on the Blue Shield Board for the three-year term ending March 1967.

4. *State Board of Medical Registration's new ruling regarding licensing in Indiana* was again discussed by Dr. Paris who spoke of the great amount of unfavorable publicity this regulation had received in southern Indiana.

Dr. Black suggested that the medical members of the State Board be invited to meet with the Council to discuss this matter.

Dr. Glock moved that as soon as possible the Commission on Medical Education and Licensure meet with the medical members of the State Board of Medical Registration for the purpose of clarification of this particular problem, and other problems, and further, that the medical members of the Board of Medical Registration be invited to meet with the Council at the next regular Council meeting for the same purpose. Motion duly seconded, put to vote, and carried.

5. *Group life insurance.* For the information of the Council, Dr. Donato presented the details of a proposed group life insurance program designed especially for Indiana physicians. Physisians are eligible to apply prior to age 60, and while actively engaged in the practice of medicine. After the enrollment period, evidence of insurability will be required of all applicants. Individual policies will be issued, guaranteed renewable to age 70, and convertible to permanent insurance to age 70; annual premium of $50.00 for amounts from $10,000 decreasing to $1,000, depending upon age.

Dr. Edwards moved that mimeographed copies of this plan be prepared and sent to members of the Council and the Commission on Medical Economics and Insurance for their information only. Motion seconded, put to vote, and carried.

6. *1965 annual convention.* The chairman called attention to the fact that the AMA Congress on Occupational Health will meet in Indianapolis at the time of the State Medical Association's 1965 annual convention, and asked if this group should meet prior, in conjunction with, or after the state association's meeting. **By consent, it was agreed that the Congress on Occupational Health should**

meet simultaneously with the Indiana State Medical Association in 1965.

There being no further business, the meeting adjourned to meet again at 12 noon, EST, Monday, October 14, 1963, in Parlor "A", Columbia Club, Indianapolis.

EXECUTIVE COMMITTEE

July 13, 1963

Present: Wendell E. Covalt, M.D., chairman; Maurice E. Glock, M.D.; Kenneth O. Neumann, M.D., Ottis N. Olvey, M.D.

Frank B. Ramsey, M.D., editor of *The Journal*, Robert Hollowell and Ralph Hamill, attorneys, and James A. Waggener, executive secretary.

Membership Report:

Number of Members as of December 31, 1962	4,340
1963 members as of June 30, 1963:	
Full dues paying	3,731
Residents and interns	140
Council remitted	44
Senior	338
Honorary	2
Military	55
Total 1963 members as of June 30, 1963	4,310
Number of members as of June 30, 1962	4,299
Gain over last year	11

Number of AMA members as of June 30, 1963	4,199
Total 1962 AMA members as of June 30, 1962	4,175
Gain over last year	24
1963 AMA members: Dues paying	3,619
Exempt, but active	580
	4,199
Number who have paid state dues but not AMA dues as of June 30, 1963	111

Headquarters Office

Office Equipment: On motion of Drs. Glock and Neumann the secretary was authorized to purchase a folding machine and mimeograph for the headquarters office.

Building Matters

Use of building by other organizations: Upon motion of Dr. Glock the Building Committee is to be requested to study the advisability of permitting para-medical groups to use the headquarters building for meetings and to establish rules for use of the building by such groups.

The Building Committee is to consider whether or not a charge should be made when meetings do not conflict with the regular business of the headquarters office and when meetings are held during the regular office hours. If the building is used other than during regular office hours the committee should discuss the matter of a fee to be charged to cover extra personnel, utilities, and cleanup service.

The Building Committee's recommendations are to be presented to the Executive Committee and will be subject to final approval of the Council.

Division on Mental Health: The secretary reported that Dr. Ginsberg had discussed with him the possibility of putting the new Division on Mental Health Planning in the basement of the association headquarters building and by consent it was agreed that the secretary should investigate this proposal further and get all the facts, and report back to the Executive Committee.

Treasurer's Office

The committee reviewed the financial statements for May and June and the quarterly report of Wolf & Company.

Annual Convention, Indianapolis, October 15, 16, 17, 1963

Program: The annual convention program was reviewed and upon motion of Drs. Neumann and Glock it was voted that the last meeting of the House of Delegates be held at the Columbia Club and that the meeting be called for 9 or 9:30 a.m.

Guest list: The guest list for the meeting was approved by consent.

Budget: On motion of Drs. Neumann and Covalt, budgets for the sporting events are not to exceed the amount spent last year.

By consent it was agreed that the panel discussion on "Diagnosis and Treatment of Acute Respiratory Infections," scheduled for 1:00 p.m. Wednesday, October 16, and the panel discussion to be sponsored by the Section on Nervous and Mental Diseases, presently scheduled for 3:30 p.m. Wednesday, October 16, shall be held concurrently at 1:00 p.m., and that at 3:30 p.m. the program on "Americanism" which was presented at the Conference of Presidents in Atlantic City is to be given.

Fifty-Year Club chairman: By consent Dr. Don F. Cameron was selected to serve as chairman of the Fifty-Year Club.

Legislation

The secretary reported on the status of the King-Anderson Bill in the present Congress and of a newspaper report that a test would be made on the validity of the Governor's veto of several bills, including the Kerr-Mills Implementation Act for Indiana.

Organization Matters

A letter from Dr. Carl D. Martz concerning the affiliation of the association with the Indiana Rehabilitation Association was read, and upon motion of Drs. Glock and Neumann this is to be referred to the Commission on Public Health for

recommendation and report back to the Executive Committee.

For the information of the committee a resolution received from the Delaware-Blackford County Medical Society was read and this was referred to the Council for its information.

Letter from the Arthritis and Rheumatism Foundation requesting use of the association mailing list was approved on motion of Drs. Glock and Neumann providing this organization has been approved by the Commission on Voluntary Health Agencies.

A letter from the executive secretary of the Indiana Association of Licensed Nursing Homes regarding representation of the Indiana State Medical Association on the Nursing Home Education, Training, Research and Facility Development Program was reviewed and the president is to discuss this with the administrator of the Indiana University Hospitals.

Information forwarded to the association by the Kentucky State Medical Association regarding the newspaper article appearing in the Louisville papers concerning the recent action of the State Board of Medical Registration and Examination of Indiana was referred to the Commission on Medical Education and Licensure with the suggestion that the members of the commission invite Dr. John Paris and the members of the medical board to meet with them for a discussion of this program.

The proposed change in the Constitution by the Commission on Constitution and Bylaws concerning the eligibility of senior members for medical defense coverage was read for the information of the Executive Committee.

Upon motion of Drs. Neumann and Glock the Executive Committee is to recommend to the Council that the responsibility for carrying out the activities of the new Department of Medicine and Religion established by the American Medical Association be assigned to the Commission on Inter-Professional Relations.

A letter from Dr. William G. Bannon, chairman of the Commission on Public Information, concerning the purchase of the AMA's Emergency Medical Identification Cards for distribution at the State Fair was read, and on motion of Drs. Neumann and Glock the secretary was instructed to purchase a sufficient quantity for use at the State Fair and an additional supply for distribution to all members of the Association.

Future Meetings

SMJAB Conference, October 21 and 22, Sheraton Chicago Hotel, Chicago. Upon recommendation of Dr. Ramsey, consent was given for the two *Journal* employees, the executive secretary and the editor of *The Journal*, to attend the State Medical Journal Advertising Bureau Conference.

AMA Institute, Chicago, August 21, 22 and 23, 1963. By consent it was agreed that the entire Executive Committee, the field men, the chairman of the Commission on Public Information, the chairman of the Commission on Voluntary Health Agencies, and the executive secretary should be asked to attend this meeting.

The notice of the National Conference on Institutionally Acquired Infections, to be held at the University of Minnesota, September 4, 5 and 6, 1963, was read and it was decided that no representative would be authorized to attend this meeting.

Notice of the Congress on Occupational Health, to be held in San Francisco in September was read and it was decided that no representative would be sent to this meeting.

National Rural Health Conference, Hot Springs, Arkansas, September 20 and 21, 1963. By consent it was voted that Dr. Eugene S. Rifner and Dr. Robert M. Seibel should be asked to attend this meeting.

There being no further business, the committee adjourned to meet again on Wednesday evening, August 21, 1963.

cut Rx writing by 2/3 in colds, flu or grippe

NAME _____

ADDRESS _____

℞

No need to write three separate prescriptions for antitussive, decongestant and analgesic relief of common cold, flu or grippe symptoms when it is therapeutically correct... economically sound... to specify

ANTITUSSIVE/DECONGESTANT/ANALGESIC
'EMPRAZIL-C'® TABLETS

Each tablet contains:

Codeine Phosphate*	15 mg.
'Sudafed'® brand Pseudoephedrine Hydrochloride	20 mg.
'Perazil'® brand Chlorcyclizine Hydrochloride	15 mg.
Phenacetin	150 mg.
Aspirin	200 mg.
Caffeine	30 mg.

*Warning—may be habit forming

'Emprazil-C' Tablets are available on prescription only.

Dosage: Adults and children over 12 years—1 or 2 tablets—3 times daily as required. Children 6 to 12 years—1 tablet—3 times daily as required. **Caution:** While pseudoephedrine is virtually without pressor effect in normotensive patients, it should be used with caution in hypertension. Also, while chlorcyclizine has a low incidence of antihistaminic drowsiness, the usual precautions should be observed. **Supplied:** Bottles of 100 tablets.

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This summary of what is happening in Washington is prepared by A.M.A.'s Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D.C.--The Food and Drug Administration has proposed banning more than 50 so-called "cold cure" prescription drugs containing antibiotics and other anti-microbial agents. The action was recommended by a team of leading medical scientists who found that the antibiotics have no effect whatsoever on the common cold.

This proposal followed an earlier FDA crackdown on a wide variety of over-the-counter lozenges, nose drops and sprays, mouth washes and deodorants, skin lotions and ointments containing antibiotics. It was estimated that about 200 such compounds were affected.

The most recent FDA proposal would prevent the certification of prescriptions which include antibiotics in conjunction with analgesics, antihistamines, decongestants and caffeine. It would affect only prescription drugs taken by mouth.

The order also would initiate regulatory action, if necessary, to remove from the market analgesics, decongestants, caffeine and antihistamines when mixed with any other anti-microbial agents, primarily the sulfa family.

At the request of the FDA, the National Academy of Sciences had named a panel to evaluate the "cold cures." The chairman was Dr. Harry Dowling, chairman of the American Medical Association Council on Drugs and on the faculty of the University of Illinois School of Medicine.

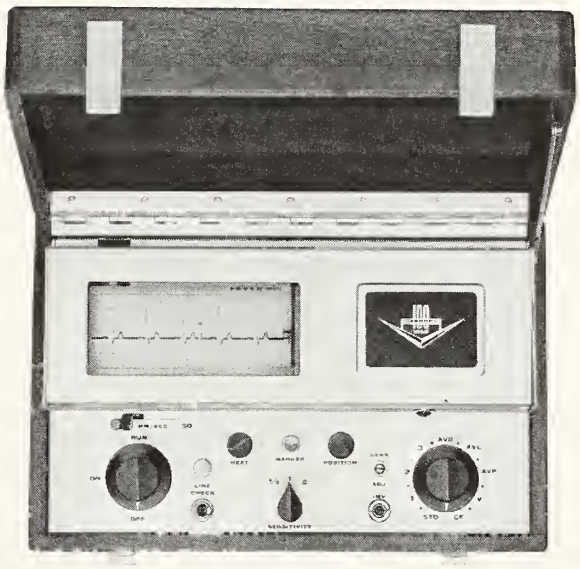
The panel unanimously concluded:

1. There is no acceptable evidence that any anti-microbial agent is of any value in the treatment of the common cold or any other upper respiratory viral infection.

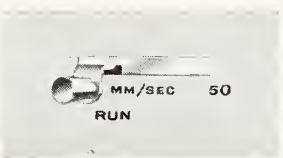
2. Anti-microbial agents are of no value in preventing bacterial complications in patients with common colds who are otherwise healthy, and therefore should not be used. They may have some value in patients with underlying chronic pulmonary disease. When prophylactic therapy of respiratory infection is justified, the anti-microbial agent that may be used must be one that is relatively free of inherent toxicity. This would preclude the use of chloramphenicol, triacetyloleandomycin, and/or sulfonamide products.

3. The antibiotic in a drug which includes analgesics, antihistaminics, and possibly decongestants would have no effect on the cold itself and there is insufficient clinical evidence to show that it would be of value in the prevention of complicating

Continued



added capabilities in a cardiograph . . . with the Sanborn "100 Viso"





All electrocardiographs produce a graphic record to aid you in your diagnosis, but the Sanborn "100 Viso" and its mobile "100M" version add two significant capabilities to this basic ECG function: complexes can be "expanded" in time by running the chart at 50 mm/sec. instead of 25 mm/sec., and amplitude or height of the tracing can be adjusted to suit the leads being recorded (sensitivity can be set at normal, one-half normal or twice the normal value). Provision is also made for connecting a scope for signal display, and for recording other physiologic phenomena.

Coupled with world-famous Sanborn cardiograph dependability, precision and locally-available supplies — and the exclusive 15-Day No-Obligation Trial Plan — these 100 and 100M Viso-Cardiette advantages can make a significant difference in ECG value to you. Your nearby Sanborn man can provide full details, or write the main office.

SANBORN COMPANY
Medical Division, Waltham 54, Mass.

INDIANAPOLIS *Resident Representative* 1635 North Gent Ave., Melrose 2-3768

infections of a cold. The symptomatic relief that may be provided by the other ingredients of such a preparation is no justification for any such product to contain an anti-microbial agent.

DEFENSE DEPARTMENT DEFERS CERTAIN RESIDENTS

The Defense Department has modified the Berry Plan to permit deferment of a larger number of residents from the military draft until after they have completed their specialty training.

Dr. Shirley C. Fisk, deputy assistant defense secretary for health and medical affairs, outlined the modification in a letter to deans of medical schools. He said, in part:

"The three Armed Forces are given the option of deciding in which specialties they will offer additional deferments. In any given specialty, however, the number of additional deferments will not exceed the number deferred in the Berry Plan. We believe that this policy will have the twofold benefit of deferring a larger number of residents and of creating an immediately available group of specialists for military service should the need arise."

PMA, DRUG PRODUCERS CHALLENGE FEDERAL REGULATION

The Pharmaceutical Manufacturers Association (PMA) and 37 prescription drug producers challenged in a federal district court the legal validity of a drug advertising and labeling regulation recently promulgated by the Food and Drug Administration (FDA).

The action, filed in the U.S. District Court in Wilmington, Del., alleged that the regulation is "unauthorized by and contrary to law."

Secretary of Health, Education and Welfare Anthony J. Celebrezze and Food and Drug Commissioner George P. Larrick were named as defendants.

The controversial regulation was issued last June 20 as a result of the 1962 amendments to the Food, Drug, and Cosmetic Act. The amended law requires only that "established names" of prescription drugs be printed in labeling and advertising "prominently and in type at least half as large as that used for any proprietary name." While on the other hand the regulation would require the established name to appear "each time" the protected trademark or brand name appears in an advertisement or on a label.

Established names of drugs usually are originated by manufacturers in cooperation with the U.S. Pharmacopeia and the American Medical Association. An established name may be used by any producer to identify the active or therapeutic ingredient in a drug product. In contrast, a protected brand name may be used only by a single producer to identify himself and his product.

The plaintiffs pointed out that drugs with the same established name may differ in therapeutic effect because of varying inactive ingredients and manufacturing methods.

The plaintiffs also said that, in addition to going beyond statutory authority, the regulation requiring repetition of the established name with each use of a protected brand name on a container label, in a package insert, or in any advertising to physicians would be confusing and would make reading more difficult, to the detriment of doctors and ultimately their patients. ◄

When you recognize signs of depression and anxiety and associate them with an organic condition—add 'Deprol' to your therapy.

Typical conditions in which 'Deprol' should be considered for control of the associated depression and anxiety:

Cancer ■ Cardiovascular disorders ■ Arthritis ■ Menopause ■ Alcoholism ■ Obesity ■ Asthma, hay fever and related allergies ■ Chronic infectious diseases ■ Pregnancy and post partum ■ Dermatoses ■ G.I. disorders, and many other organic disturbances.

When you recognize depression and anxiety traceable to an emotionally charged situation with no somatic disorder—start the patient on 'Deprol'.

Typical situations in which 'Deprol' is indicated:

Fear of cancer or other life-threatening disease ■ Pre- and post-operative fears ■ Marital problems ■ Death of a loved one ■ Loss of work ■ Retirement problems ■ Financial worries, and many other stressful situations.

Deprol®

meprobamate 400 mg. + benactyzine hydrochloride 1 mg.

BRIEF SUMMARY: *Indications:* Depression, especially when accompanied by anxiety, tension, agitation, rumination or insomnia. *Side Effects:* Slight drowsiness and, rarely, allergic reactions, due to meprobamate, and occasional dizziness or feeling of depersonalization in higher dosage, due to benactyzine, may occur. Meprobamate may increase effects of excessive alcohol. Use with care in patients with suicidal tendencies. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction. Withdraw gradually after prolonged use at high dosage. *Complete product information available to physicians on request.*

USUAL ADULT DOSAGE: 1 tablet q.i.d. May be increased gradually, as needed, to 3 tablets q.i.d.; with establishment of relief, may be reduced gradually to maintenance levels.

SUPPLIED: Light-pink, scored tablets. Bottles of 50.

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Letters

to the editor

To the Editor:

Boric acid-iodine powder 4% is made by dissolving 4 grams of iodine crystals in 50 cc.'s of ether, pouring the solution into 100 grams of boric acid powder, and stirring to mix thoroughly. It is usable in a deVilbiss plastic powder blower after the ether has evaporated. It is recommended as an antiseptic for all small areas as in the ear canal for external and internal infections. It should not be used on large areas of eroded skin.

One application of boric acid-iodine powder recently cured a chronic (for a year) ear infection with the colon bacillus which had resisted alcoholic antiseptics.

J. R. Frank, M.D.
Valparaiso, Indiana

To the Editor:

The addition of Coramine to Pentothal and other barbiturate anesthetic agents for intravenous use for the purpose of insuring good respiratory exchange was suggested to me by Dr. John S. Lundy many years ago.

Recently I talked to Dr. Lundy and found that he still favors the practice even though intravenous agents are given now mostly for induction. One to one and a half ampules of Coramine (1.5 cc. per ampule) is mixed with 50 cc's (0.5 grams) of Pentothal, Brevital or Surital. My experience with this has been most satisfactory.

Hugh S. Ramsey, M.D.
Bloomington, Indiana

To the Editor:

This is just to let you know, Dr. Ramsey how very pleased we were to see the coverage you gave to veterinary medicine's centennial year in your July, 1963, journal. The cover picture, the comments about the cover, the editorial, and the publication of Dr. Terry's address all combined to make that issue a distinct tribute to veterinary medicine.

The first 100 years of organized veterinary medicine has only begun to show what can be done when physicians and veterinarians combine their skills and knowledge in public health and in research. Indiana is known as one of the progressive states in this respect, and your editorial treatment of our centennial indicates that the excellent interprofessional relations will continue to thrive there.

Sincerely yours,
D. A. Price, D.V.M.
Editor-in-Chief, *The Journal of the American Veterinary Medical Association*

To the Editor:

Announcing . . . the availability of the fifth in the series of "Guides to the Evaluation of Permanent Impairment" developed by the Committee on Medical Rating of Physical Impairment and authorized for publication by the AMA Board of Trustees. It is entitled: "Guides to the Evaluation of Permanent Impairment—The Central Nervous System."

This guide, like all the others in the series, has been designed primarily for use by physicians. The guides are, however, of interest and use to all concerned with the medical, administrative or judicial aspects of programs for the disabled.

The other published guides in the series deal with the extremities and back, the visual system, the cardiovascular system, and ear, nose, throat, and related structures.

The committee would appreciate your assistance in informing your subscribers of the publication of this recent guide, which appeared in the July 6, 1963 issue of *The Journal* of the American Medical Association. A limited number of copies of the guides may be obtained, without charge, upon written request to the Committee on Medical Rating of Physical Impairment, 535 North Dearborn St., Chicago 10.

Raymond M. McKeown, M.D.,
Chairman, Committee on Medical Rating of Physical Impairment

To the Editor:

In 1958, the Indiana Shared Dietitian Project Committee compiled and published

Continued on page 1282

call for analgesic-relaxant action···

Whether spasm is induced by pain, or pain by spasm, satisfactory control usually requires analgesic as well as relaxant action. In such cases, ROBAXISAL combats both pain and spasm. When apprehension is a complicating factor, ROBAXISAL-PH is indicated.

Among the many conditions for which ROBAXISAL and ROBAXISAL-PH have been found effective are: strains and sprains, painful disorders of the back, "whiplash" injury, myositis, pain and spasm associated with arthritis, low back pain, torticollis, and headache associated with muscular tension.

Side effects such as lightheadedness, slight drowsiness, dizziness and nausea may infrequently occur but usually disappear on reduction of dosage. There are no specific contraindications other than hypersensitivity to any one of the components.

*Skeletal muscle spasm is a two-headed dragon of 'PAIN & SPASM'



ROBAXISAL®

Each pink-and-white laminated Tablet contains:

ROBAXIN (methocarbamol, Robins)	400 mg.
U.S. Pat. No. 2770649	
Aspirin (5 gr.)	325 mg.

ROBAXISAL®-PH

Each green-and-white laminated Tablet contains:

ROBAXIN (methocarbamol, Robins)	400 mg.	Hyoscyamine sulfate	0.016 mg.
Phenacetin	97 mg.	Phenobarbital (1/8 gr.)	8.1 mg.
Aspirin	81 mg.	(Warning: May be habit forming)	

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reduce or obviate the need for transfusions and their attendant dangers

KOAGAMIN is indicated whenever capillary or venous bleeding presents a problem.

KOAGAMIN has an outstanding safety record -- in 25 years of use no report of an untoward reaction has been received; however, it should be used with care on patients with a predisposition to thrombosis.



KOAGAMIN®

parenteral hemostat

Each cc contains: 5 mg. oxalic acid, 2.5 mg. malonic acid, phenal 0.25%; sodium carbonate as buffer.

Complete data with each 10cc vial. Therapy chart on request.

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LETTERS

Continued

the *Indiana Diet Manual*—a dietary manual planned especially for the small hospital or nursing home without the services of a dietitian. The acceptance of the manual was most gratifying and because of demand, it was reprinted twice.

We are pleased to announce that the *Indiana Diet Manual* has been revised in response to requests for information on more recent modifications, such as the fat-controlled diet and the low protein diet. Because of renewed interest a low purine diet has been included. Other changes include requested information concerning the carbohydrate, protein, fat and caloric content of each modification. A few changes have been made in terminology to allow for clearer understanding.

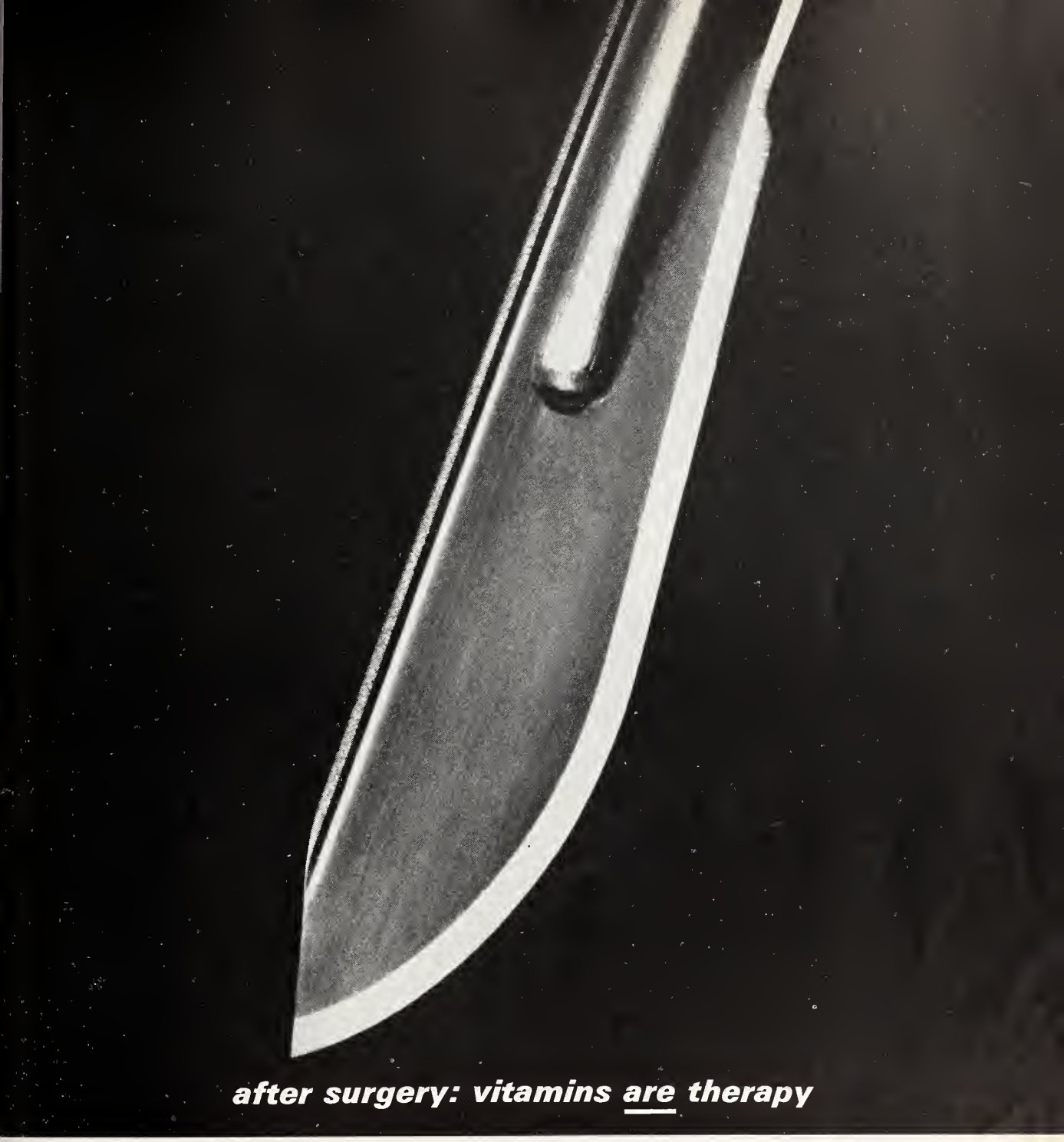
The manual may be obtained at $1.00 per copy from Mrs. Kathryn Sheedy, Chairman, Indiana Shared Dietitian Project, 122 E. 22nd Street, Indianapolis 2, Indiana.

Sincerely,

Mrs. Kathryn Sheedy, Chairman
Indiana Shared Dietition Project ◄



"Haven't I had a hard enough day at the clinic? Now don't tell me there's something wrong with you, Mildred!"



after surgery: vitamins are therapy

Nutritional supplementation is basic to postoperative care. Therapeutic allowances of B and C vitamins help meet increased metabolic requirements and compensate for stress depletion. STRESSCAPS can set the patient on a more favorable course and contribute to full recovery.

FOR PROFESSIONAL

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Each capsule contains: Vitamin B_1 (Thiamine Mononitrate)...10 mg. / Vitamin B_2 (Riboflavin)...10 mg. / Niacinamide... 100 mg. / Vitamin C (Ascorbic Acid)...300 mg. / Vitamin B_6 (Pyridoxine HCl)...2 mg. / Vitamin B_{12} Crystalline... 4 mcgm. / Calcium Pantothenate...20 mg. Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100.

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LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentotion of opinions which appear on the editorial pages of the public press, and which ore of interest to the medical profession. Its function is to review comments which may be favorable or unfavoroble to medicine. Members are invited to submit editorial clippings for this column.

To Help the Mentally Ill

The State Medical Board has an opportunity to alleviate suffering in the state mental hospitals.

State hospitals are notoriously short of doctors. Indiana can hardly compete in the open medical market for top men when it won't or can't pay the going wage.

The state is bound by the strict licensing rule set by the State Medical Board, some of which smacks of simple trade unionism for private practice.

There should be no thought of lowering standards for the medical stewards of everyone's life and health.

Relaxing two restrictions to let the mental health commissioner pick the best men would hardly lower these standards.

It would greatly improve health care where it is vitally needed.

For humane reasons, and even for financial ones, it is inexcusable to keep the state mental hospitals custodial institutions, when proper therapy could get many patients back into constructive lives in society.

The two restrictions, against doctors from 14 states with which Indiana has no reciprocity and those from foreign countries who could qualify without residency, are harmful.

There is no need to lift restrictions for private practice to help the state mental hospitals.

An amended rule could apply only to these state institutions. It would free the mental health commissioner, Dr. Stewart T. Ginsberg, to get the best men.

The State Medical Board should use the opportunity it has to do this.—*Indianapolis Times*, July 26, 1963.

Economy for Hospitals

Any proposals that will contribute toward a reduction in the rising costs of hospital care should be welcomed alike by the paying public and hospital officials.

A committee of the Indianapolis Hospital Development Association has been appointed to study a centralized laundry facility for hospitals in this area.

If such action is found feasible it should provide an example of how our hospitals could co-operate in other areas of operation to reduce costs. In other cities, centralized facilities have brought about significant savings.

This study is timely, since a recent survey indicates a need for nearly 2,000 additional hospital beds by 1975 at a cost of nearly $40 million. Regardless of how this expansion will be financed—by voluntary public subscription or per patient outlay—it is something which should concern the entire population of metropolitan Indianapolis.

Beyond a projected new building program, therefore, the public should be keenly interested in anything that will help keep operational costs at a minimum.

We hope the Development Association Committee is able to come up with an affirmative answer to the centralized laundry proposal, and that any further ideas of the kind may be thoroughly explored. The association is to be commended for its initiative.—*Indianapolis News*, August 13, 1963.

Continued



For peptic ulcer gastric hyperacidity and gastritis...

In year-long study on peptic-ulcer patients

New Creamalin®
Antacid Tablets

*"...faster in onset of action...and for a longer period"**

"Clinical studies in 85 patients with duodenal ulcer ...confirmed the superiority of the new preparation [new Creamalin] over standard aluminum hydroxide preparations, in that prompt relief was achieved and maintained throughout the period of observation."*

Patients were followed for about one year.

New Creamalin promotes ulcer healing, permits less frequent feedings because it is so long-acting. Heartburn and epigastric distress were "...easily and adequately controlled...."* New Creamalin has the therapeutic advantage of a liquid antacid with the convenience of a palatable tablet. *It does not cause constipation.*

Each new Creamalin tablet contains 320 mg. of specially processed highly reactive dried aluminum gel (stabilized with hexitol) with 75 mg. of magnesium hydroxide. Minute particles offer a vastly increased surface area.

Dosage: Gastric hyperacidity—from 2 to 4 tablets as needed. Peptic ulcer or gastritis—from 2 to 4 tablets every two to four hours. *How Supplied:* Bottles of 50, 100, 200 and 1000.

Now also available—New Creamalin Improved Formula Liquid. Pleasant mint flavor—creamy pink color. Stabilized reactive aluminum and magnesium hydroxide gel (1 teaspoon equals 1 tablet). Bottles of 8 and 16 fl. oz.

Creamalin, trademark reg. U.S. Pat. Off.

*Schwartz, I. R.:
Current Therap. Res. 3:29, Feb., 1961.

Winthrop LABORATORIES New York 18, N. Y.

FOURTH ESTATE

Continued

Abiliiy Counts

When the news flashed that Dr. Walter L. Portteus had ended his tenure on earth, several thoughts passed through our mind.

First of all, the obituary of this fine Franklin physician could be thorough and his virtues well extolled. This would not have been hard to do because he had given much of himself to his community, his family and his profession and therefore his life had been full.

However, we are convinced that this man had another unique distinction. He served his fellow man in more ways than one. He also gave his ability to his chosen profession—medicine. We are not particularly referring to the fact that he attended his patients with his medical skill, nor contributed money to charitable causes. We know he did these things but what we have reference to was serving on various medical boards and societies from a state to a national level. He was never too busy to work with his fellow medical men in helping to perfect some technic or information which might be valuable to his fellow workers.

"Dr. Port," as he was sometimes referred to by his patients who dearly loved him, never seemed to wear out. He was on the go considerably in both his practice, and also his various jobs with medical associations and groups in both state and nation.

This was testimonial enough that he was willing at no personal gain to share his ability with others of the same profession in promoting the greatest humanitarian acts, the caring for the sick.

It is safe in saying that Dr. Portteus probably gave more of his ability to his profession than any other modern man or woman in the county.

His patients will miss him, his family will miss him, his friends will miss him, the doctors and medical people will miss him and there will be many others who will miss him too.

He was truly a medical man among medical people!—*Greenwood News*, August 23, 1963.

Continued



Coca-Cola, too, is compatible with a well-balanced menu. As a pure, wholesome drink, it provides a bit of quick energy..brings you back refreshed after work or play. It contributes to good health by providing a pleasurable moment's pause from the pace of a busy day.

DRINK Coca-Cola TRADE MARK ®

there is nothing "new" about Thorazine®



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In the nine years since it became available to American physicians, Thorazine (chlorpromazine, SK&F) has been more widely used, more thoroughly investigated and more extensively documented than any other agent of its type.

Its actions, effects—and side effects—are well known throughout the medical profession. Its efficacy has been clearly demonstrated. And when properly used, its advantages far outweigh any possible disadvantages.

This is why there is nothing "new" about Thorazine (chlorpromazine, SK&F). This is why it remains the first choice in many conditions—and the standard against which other agents are inevitably compared.

This is why it is one of the fundamental drugs in medicine.

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Getting Too Big

A recent issue of *U. S. News & World Report* features an engrossing article entitled "Is 'Big Government' in U. S. Getting Too Big?"

The answer, by any reasonable yardstick, must be an emphatic yes.

There are some alarming examples in the article of just how pervasive government has become:

Federal, state and local government employs one out of every six workers in the United States.

Government accounts for one out of every five dollars spent for goods and services.

There are 12.3 million workers on public payrolls, as compared with 7.1 million 15 years ago.

Taxes and other government income amount to 35% of total national income.

Out of every $4.50 in national personal income, one dollar is paid by government.

Government pays one out of every four dollars in total outlay for construction.

Public agencies spend a total of $165 billion a year, three times the total of 15 years ago.

More than a third of all home mortgage debt is insured or granted by the Federal government.

To place that in historical perspective, a recent survey discovered that the Federal government is now the biggest land owner, property manager, renter, mover and hauler, medical clinician, lender, insurer, mortgage broker, employer, debtor, taxer and spender in all history.

If government feels itself entitled to assume all these tasks, what place is there for private citizens?

The place for private citizens, we suggest, is laboring in behalf of candidates for public office who realize that government should properly be concerned with preserving individual liberty—not draining it away.—*Indianapolis News*, Sept. 10, 1963.

Effort Required Now For Future School

The proposal to locate a second state medical school in Evansville is an intriguing one. Benefits to the area would be numerous, and it seems a logical location from the standpoint of service to prospective students.

Eventual realization of the proposed school will require a lot of effort on the part of the local community. And, although construction of a second facility anywhere in the state is likely to be years away, it's not too early to map plans for a campaign in behalf of Evansville.

The dean of Indiana University School of Medicine called a new school "a necessity" in a conference with the Governor about 10 days ago. Already other cities are lining up for site consideration. Many more will make themselves available if a decision is made to establish one.

A strong case can be made for Evansville as a site. Geographically, location here makes sense. Dr. Herman M. Baker, who first alerted the community that a new school was being talked, points out that Evansville is in the center of a vast area not served by a medical school. The present state school is at Indianapolis. Others are located in Chicago, St. Louis, Nashville, Louisville and Cincinnati.

Evansville's status as the second biggest medical center in the state, second only to Indianapolis, should be an attraction. Modern and expanding hospital facilities and medical teaching programs going on here now should be of major consideration in choice of a site.

It does not necessarily follow that establishment of a new state school will come just because the need of it has been voiced publicly by a responsible spokesman. However, due to a national shortage of medical graduates, it seem logical that Indiana will someday be forced to add to its medical educational facilities.

Totaling of the city's assets now, plus continuing effort pointing toward that day, could make Evansville the number one contender in an inevitable statewide scramble for the new school.—*Evansville Courier*, August 19, 1963. ◄

The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 56 — October 1963 — Number 10

Surgical Treatment of Parkinson's Disease and Other Involuntary Movements

KARL L. MANDERS, M.D.
Indianapolis

SINCE 1956, over 100 patients from Indiana have been operated upon by myself with various surgical procedures for Parkinson's disease and other syndromes involving involuntary movements. I have used primarily the surgical procedures first advanced by Dr. Irving Cooper of New York City. These procedures consist of the simple introduction of some type of needle or cannula into the brain with the local destruction of either the globus pallidus or the ventrolateral nucleus of the thalamus. The procedures performed have always involved not only the mechanical destruction of the tissue by inflating a balloon at the end of the cannula, but also, by the introduction of alcohol or some similar destructive substance into the area, making the destruction permanent. Recently I have become interested in Dr. Cooper's new technic which involves a destruction of a similar area by the use of intense cold. This is called cryogenic thalamectomy.

Standards for the selection of patients for this procedure were not well defined at first. After gaining experience in this particular field, however, I was able to narrow the restrictions, and at the present time it appears that anyone who is a good or even fair medical risk will be a satisfactory candidate for the newer technic and that the surgical risk itself is quite minimal.

Of the more than 100 patients operated upon, over 81% had evidence of bilateral involvement. Only 19% had so called true unilateral Parkinson's disease and all these patients have had subsequent involvement of the unaffected side in months or years following surgery.

We must therefore understand that Parkinson's disease is, by its very nature, a disease which involves both sides. A physician, it is true, may early in the course of the disease process see involvement of only one side, however the patient should always be advised that although the disease appears to be limited, it is indeed a diffuse syndrome.

Causative Factor Not Important

In over 50% of the patients operated upon, there was a significant history of the patient having been exposed to the influenza epidemic of 1918. I feel, however, that the causative factor is not important as far as the selection of patients for the procedure. Indeed, patients who have arteriosclerotic Parkinson's disease do as well with surgery as those who have a post-encephalitic condition. It is to be noted that invol-

untary tremors of all kinds respond satisfactorily to this operation. Thus, we have been successful in treatment of intention tremor seen in multiple sclerosis, choreoathetosis, Huntington's chorea, dystonias as well as torticollis. It is true that any involuntary movement appears to be affected favorably by the procedure. It is also to be noted that the more violent the tremor or movement, the seemingly better results obtained with surgical treatment.

I have operated upon patients who have had heart disease as well as kidney disease. I do not feel that patients who have suffered a stroke or have evidence of far advanced cerebral arteriosclerosis with memory changes and evidence of severe senility are satisfactory candidates. Almost anyone else, however, has been favorably affected by this type of treatment.

The youngest patient in the series was 12 years old and the oldest 74. There is no restriction as far as I am concerned as to age and very little restriction as far as physical condition, as noted above. The reason that we can successfully operate upon these individuals almost regardless of their physical condition, is because the entire procedure is done under local anesthesia. In fact, I do not even use pre-operative medication prior to the performance of the operation.

Over 80% of the patients operated upon were improved. Of these, 60% had complete abolishment of all tremor and rigidity on the operated side and 20% had general improvement in varying degrees. The complication rate was much higher in the early stage of surgery, however, there has been no morbidity in the past year and a half. I have found that in order to reduce the morbidity, it was necessary to modify and improve technics so that the surgical lesions could be duplicated and thus reduce the error at the target point to an absolute minimum.

The mortality rate early in the operative procedures ranged to 3%. This has now been reduced to 1% or less.

In no patient did any permanent side effect occur, except early in the development of the operation. I have had no complication of any significance for the past 18 months.

Operative Technic

With the development of the cryogenic thalamectomy by Dr. Cooper over the past 16 months, it has been my feeling that a patient now can be operated upon with even greater safety than has ever been possible before. A burr hole is simply made in the skull and after proper determination of the target area, the cryogenic cannula is introduced to the target area and the temperature of the tip of the cannula lowered by use of liquid nitrogen so as to create a temporary lesion. If correct placement has occurred, the temperature of the tip is then lowered to minus 50 degrees centigrade and a permanent lesion is thus made. The correct placement is proclaimed of course, by the complete cessation of tremor and rigidity. Multiple surgical lesions can be performed as necessary, but usually only three to four patients out of 100 would require a second lesion. Following the relief of the tremor and rigidity or the abnormal movement, the cannula is then withdrawn, the wound is closed and the patient is able to leave the hospital within five to seven days.

It appears to me that the cryogenic technic will completely supplant the older technics. The operation now has become completely safe and carries the same morbidity of established neurosurgical procedures. We would anticipate a mortality rate to remain at 1% or less and the morbidity rate to be minimal.

Those patients who have had bilateral disease, either Parkinsonian or other involuntary movement syndromes, have in 12% of this series been subjected to bilateral procedures. Usually I wait from six to eight months before performing the second side. In these cases, fortunately, no further neurological deficit has occurred secondary to our operation. Again with the use of the cryogenic technic, a bilateral procedure will offer less risk than it did before.

Experience gained over the past six years with Parkinsonian patients treated or controlled by medication has shown that the

disease process tends to progress and the patient eventually escapes the beneficial effects of such medication treatment.

My feeling now is that with the newer technics developed we should operate on these individuals as early as possible when they are better surgical risks. Although a medical attempt may be made to control their disease process, if it is not readily amenable to such control, earlier consideration of the surgical treatment should then be made.

Cryogenic surgery may, in the immediate future, also offer a practical approach to what have previously been inaccessible tumors and we hope in future papers to discuss this type of technic. Improvement in the Parkinson's patient as well as in that patient suffering some other type of involuntary movement disorder can be expected in over 90% of those so treated. Certainly the future holds a great deal in a field where only hopelessness and despair held reign prior to this new surgical advance. ◄

3400 N. Meridian
Indianapolis, Indiana

From *The Journal* 50 Years Ago

. . . Two conditions stand out most prominently as sufficient proof of our long neglect in this [psychotherapy] field of medicine.

First, the oversight of medical colleges in not teaching this important means of treating diseases, and second, the great and rapidly increasing number of both sick and well who have turned from regular, scientific medicine to the various irregular cults and creeds, many of which minister solely to the mind.

Just why medical educators and psychologists should have neglected this important branch of therapy until the evil influence was fully on us is difficult to explain, and certainly marks one pitfall of the past, if not of the immediate future.

A few years ago a physician contented himself in acquiring a very superficial knowledge of the symptomatic indications for the use of a few drugs, and those usually used were of heroic action. Neurasthenia was not in our medical nomenclature as yet. The tyranny of books, social struggles, the mad speed of the automobile, business and social life were not yet as active in causing morbid mental states, accompanied by nervous symptoms closely mimicking those of organic disease, though only the expression of a functionally exhausted brain and nervous system.

Psychotherapy today is an absolute necessity in the treatment of any patient, either medically or surgically. Not alone as a therapeutic measure do we observe its greatest good, but often in holding the patient faithful to a line of treatment, even though only hygenic, or by freeing his mind from fear that he may quietly relax while rational drug therapy is being employed. . . . "Pitfalls in the Progress of Medicine" by A. C. Kimberlin, M.D., *JISMA*, October, 1913.

Normal Intrauterine Pregnancy Following Abdominal Pregnancy

WALTER A. DYCUS, M.D.
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ECTOPIC PREGNANCY occurs once in every 300 pregnancies, and intra-abdominal pregnancy reportedly occurs about once in 65 ectopic pregnancies.[2] Although such cases are not rare they are certainly unusual and should be reported.

Many cases of abdominal pregnancy are now diagnosed early, and full-term living infants are delivered by laparotomy. However, many times the diagnosis, as in this case, is not made or suspected until after fetal death. We feel this case is of special interest because of the management of the placenta and subsequent normal pregnancy and delivery of a normal full-term infant by the vaginal route.

In most reports of advanced abdominal pregnancy, the subsequent fertility of the patient is not mentioned. Woodbury & Jarrett[5] reported a case of an abdominal pregnancy in which the patient refused surgery for removal of the fetus and then delivered a normal living infant two years later. Thirteen years following this delivery by the vaginal route, a lithopedion was removed by laparotomy.

Case History

A 30-year-old Caucasian female, gravida II, para II, was examined for her third pregnancy April 17, 1956. She had two children living and well, the results of normal pregnancies and normal labors. Her last menstrual period was February 23, 1956, and the estimated date of confinement was December 1, 1956.

She was examined completely and found to be in excellent health. Urinalysis was negative. Blood was type A Rh positive, red blood count 4,200,000, hemoglobin 13.4 grams and white blood count 8,000. The serology reaction was negative. Her blood pressure was 120/70. The patient did not return regularly for pre-natal visits.

On July 23, 1956, she returned with a complaint of marked indigestion with some periodic, rather severe, upper right quadrant pain. The patient improved on gallbladder management plus a low fat, low condiment diet, and antispasmodics. She weighed 135 pounds, and the fetal heart beat was audible.

On October 31, 1956, she returned because of bright red spotting and cramping. The fetal heart beat could be heard to the left of the umbilicus, and the baby was in a transverse presentation. There was pain in the right upper quadrant and flank. She weighed 130 pounds, blood pressure was 104/60 and the urine showed one plus albumin. There was grade I generalized edema, so she was placed on a low sodium diet and a diuretic. She was instructed about impending dangers and allowed to return home.

She returned for an examination November 17, 1956, because she had not felt the baby move for approximately two weeks. The fetal heart beat was not heard, she weighed 125 pounds, the blood pressure was 120/80 and the urine was negative. Spotting of blood did not recur following the October 31st visit. An x-ray for signs of fetal death was requested and was reported "to show characteristic signs of fetal death." During the following four days several attempts were made to induce labor, each time following normal clot observation test on blood samples.

The patient was admitted to the hospital November 26, 1956. She was asymptomatic. Her weight was 124 pounds, hemoglobin 11 grams, red blood count 3,600,000, fibrinogen

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level was normal, but the urine showed a two plus albumin. Blood pressure was 110/70. The cervix was firm and undilated; no fetal heart was heard. An intravenous pitocin drip was used on two successive days without results.

Consultation was requested, and the diagnosis of an abdominal pregnancy was made and partially confirmed by reviewing the x-ray of November 17. A hysterosalpingogram was performed (Figure 1), and confirmed the diagnosis of an abdominal pregnancy.

Placenta not Removed at Laparotomy

A laparotomy was performed November 28, 1956, and a stillborn macerated fetus was removed from the upper abdominal cavity. There was a large mass involving the right adnexa, the cecum and the small bowel. The placenta was a part of this mass, but in view of the absence of infection, hemorrhage and bowel obstruction, separation was not attempted. The membranes and cord were cut as close as possible to the placenta, and the abdomen was closed without drainage. The post-operative course was uneventful, and the patient was discharged on the seventh day. The blood serum Friedman test for pregnancy was negative at that time.

Examinations at six weeks, three months and nine months revealed a gradual decrease in size of the placental mass. The patient was asymptomatic. The first menstrual period started four months after operation. An examination one year following surgery revealed that the patient had no complaints, and her periods were regular as before. Weight was 128 pounds, temperature 98.6, blood pressure 120/80, and the urine was negative. Bimanual examination revealed good pelvic support. The cervix was in vaginal axis, free from gross pathology, and freely movable in all directions without discomfort. The uterus was 1½ times normal size, in anterior position, nontender, and movable. The left adnexa was negative, the right adnexa was nontender and presented a nondescript thickening.

The patient was not seen again for approximately 22 months, at which time she was examined for what appeared to be an



FIGURE 1

HYSTEROSALPINGOGRAM outlines the uterine cavity and left tube. The fetal skeleton is visible in upper part of abdomen.

early uterine pregnancy. There followed a normal prenatal course and the delivery of a normal, full-term male, with left sacro-anterior presentation. The postnatal course was also entirely within normal limits.

At approximately three months following the vaginal delivery, a hysterosalpingogram was again performed. It revealed an apparently normal uterine cavity and left tube with a blunting and plugging of the right tube, confirming our suspicion that the previous placental attachment to the right adnexal area, at the time of the abdominal pregnancy, had caused fibrosis and closing of the right tube.

Discussion

This patient did not return for regular pre-natal visits during the abdominal pregnancy; however, it seems unlikely from her complaints when she did return that one would have suspected an ectopic pregnancy. The very common complaint of spotting and cramping early in pregnancy that usually accompanies the re-implantation of the products of conception was absent or at least was not mentioned by the patient.

The right upper quadrant and right flank pain was probably the result of the abdominal pregnancy rather than gallbladder pathology. However, her favorable response to medical management made further investigation seem unnecessary. In the latter part of October, when she was about 34 to 35 weeks pregnant, she presented the symptoms of a mild toxemia. When she returned in the middle of November with a dead fetus, the diagnosis was made of abruptio placentae secondary to the toxemia. The x-ray certainly showed an abnormal location of the fetus, but the request for signs of fetal death probably diverted attention from other signs. In retrospect it can also be concluded that the failure to respond to oxytocic drugs was due to the ectopic location of the products of conception.

It is generally agreed that laparotomy should be performed as soon as diagnosis of an abdominal pregnancy is made regardless of duration of pregnancy or viability of the fetus. In exceptional cases, the operation may be deferred because of religious views or if the mother pleads for the preservation of the child's life. If the surgery is to be postponed, one must be certain (1) the fetus will reach viability in a very short time, (2) x-ray examination shows normal fetal skeleton, and (3) the patient consents to remain in or near the hospital under constant supervision until laparotomy is performed.

Surgery consists of the removal of the fetus and of the placenta if the latter does not involve vital structures.[3] Two factors determine the management of the placenta in abdominal surgery—(a) inherent factors such as location of blood supply, shape and state of viability of the placenta, (b) complications such as bleeding, infection or intestinal obstruction present at the time of the operation. Approximately 83% of the placentas in abdominal pregnancies receive their blood supply from the genital tract, i.e., adnexa, broad ligaments and uterus. Complete removal of the placenta is easier under these conditions. The large multilobed placenta is difficult to remove. When a fetus has been dead for more than four weeks, removal is common.

Placenta May be Removed at Later Date

Hemorrhage is uncontrollable if any attempt is made to remove a viable placenta from such structures as the liver or intestinal tract. If the placenta is not removed, the cord and membranes should be cut as short as possible. Drainage is not necessary unless oozing and infection are present. If the placenta is not removed it will, as in this case, become reabsorbed or will form a harmless mass that can be removed at a later date. Siegler and his co-workers reported two such cases.[4]

Hreshchyshyn and co-workers reported the management of the placenta in a review of 101 cases of abdominal pregnancy.[1] They found the placenta was completely removed in 64.4%, partially in 6.9% and was left in situ in 28.7%.

In the case we are reporting, the umbilical cord and membranes were cut as close as possible to the placenta. The placenta was attached to the right adnexa, the cecum and small bowel. Even though the fetus had evidently been dead for several weeks, no attempt was made to remove the placenta in the absence of infection, hemorrhage or bowel obstruction. The abdomen was closed without drainage. The post-operative course was afebrile and uneventful.

The Friedman test was negative at the time of discharge on the seventh post-operative day. This is in keeping with the findings generally observed when a live infant is delivered and the placenta is not removed under these conditions. The Friedman test then becomes negative in about 30 days. In this case the fetus died three or four weeks before surgery was performed. The subsequent normal intrauterine pregnancy and three months postpartum hysterosalpingogram are presented because of the infrequent reference made in the literature to fertility.

Summary

(1) The management of an abdominal pregnancy with fetal death is presented.

(2) Because of attachment of placenta to cecum, small bowel, uterus and tubes, it was not disturbed.

(3) Friedman test for pregnancy was

negative about 30 days following fetal death.

(4) The placental mass had disappeared by the end of one year.

(5) Subsequent normal intrauterine pregnancy and labor are reported.

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The Drugs We Dispense

. . . In a case decided in California, a woman was awarded a judgment of $334,000 for reactions suffered from taking Chloromycetin. Both the prescribing physician and Parke Davis & Company were held liable for damages while the pharmacist who dispensed the antibiotic was exonerated. A motion for a new trial was made and this was denied so apparently the award will stick.

As reported, the physician had prescribed Chloromycetin in the treatment of a sore gum which the patient had developed following a tooth extraction. She again received the drug for a bronchial condition. The original prescription was refilled six times, upon authorization from the doctor's office—*usually from the nurse.*

Aplastic anemia developed in the patient and 60 blood transfusions plus massive androgenic therapy was required to overcome the anemia. The androgen had a serious effect with the patient developing a beard, her complexion becoming red and her face had become disfigured from acne. The allegation in the case, which was upheld by the jury, was that the doctor was negligent in prescribing the drug under the circumstances and the manufacturer was negligent in failing to warn the medical profession of the dangerous side effects.

Pharmacists must be ever cognizant of the fact that there is no such thing as a completely safe drug and that all administration of legend drugs must always be with complete knowledge and authorization of the physician. In turn physicians must recognize that they neither have the legal nor moral right to transfer this responsibility to a nurse or some one posing as a nurse.—Reprinted from *The Voice of the Pharmacist.*

Rupture of Abdominal Viscus: A Surgical Complication Following Electroshock Therapy

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THE COMPLICATIONS of electroshock therapy have been greatly reduced since the use of succinylcholine has been instituted. Since its advent, the number of fractures has been greatly reduced and, consequently, the literature has to be searched to reveal complications of this therapy. Its safety has been adequately demonstrated and the results far outweigh the inherent dangers of fractures or circulatory accidents which might occur.

The contraindications for electroshock therapy in this day and age are very few. Saltzman et al.[1] reported 38,000 treatments without serious complications; 65,000 treatments at Bournewood Hospital[3] resulted in no serious complications. Ceckley et al.[2] reported 5,000 consecutive cases without complication.

This case is presented to illustrate a rare and formidable surgical complication of electroshock treatment.

Case Report

The patient, a 43-year-old white male, married, committed to the state prison for second degree burglary, was transferred to the maximum security division of this hospital on September 1, 1960.

The diagnosis of his mental state was schizophrenic reaction, paranoid type. Electroshock treatments were recommended and a total of 38 treatments were given from November 10, 1960 to February 10, 1961. On February 10, 1961, following his last electroshock treatment at 10:00 a.m., he was observed to have severe upper abdominal pain with a temperature of 99, pulse 96, respiratory rate 32, and a blood pressure reading of 90/50. The patient was transferred to the civil side to the hospital section, and surgical consultation was requested at 2:00 p.m. the same day.

Upon examination, severe upper abdominal pain was located in the epigastric area. Fresh blood was withdrawn by aspiration with a spinal needle. Immediate surgery was advised with a diagnosis of a perforated viscus.

The abdomen was opened with a midline upper abdominal incision under ether anesthesia. Free blood was found in the upper abdomen and a one cm. perforation, five inches distal to the ligament of Treitz was found in the jejunum. This was closed with silk suture and the abdomen closed with two layers of interrupted sutures. Adequate blood was given by transfusion during the procedure. The patient's condition continued to improve and he was transferred back to the maximum security division. Recovery from this complication was complete. Biopsy of a small section of the tissue from the edge of the perforation revealed "a small piece of intestinal mucosa —mild non-specific chronic inflammation."

Discussion

This case and the reported case of M. Pa. Mancao et al.[3], reveal that intra-abdominal accidents, although rare, can occur and should be considered with the onset of signs of abdominal pain or circulatory collapse from intra-abdominal hemorrhage. As in Mancao's reported case, intraperitoneal tapping will aid in diagnosis, as it did in this

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case, and is a procedure definitely indicated. Prompt surgical consultation and treatment in these cases is life-saving.

Summary and Conclusions

A case is presented of a rupture of an abdominal viscus following electroshock treatment with the use of succinylcholine intravenously.

The rarity of this condition, and of bleeding from the spleen with a resultant splenectomy, as reported by Mancao, emphasizes the fact that the inherent dangers of electroshock therapy are minor. However, the psychiatrist with the aid of prompt surgical consultation can surmount such complications should they arise.

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What's New In Drug Research? Chaos, Mostly

One specific area, drug research, which has been affected by the new (FDA) clinical investigation regulations, is replete with examples of dismay and changed plans for drug producer and researcher. Ten U.S. pharmaceutical firms, several of them among the nation's major producers, so far report curtailment of research and development.

One company claims that of 67 agents "out" for clinical trial as of July, 1962, 13 were discontinued on August 10 (the date the new investigational drug regulations were officially proposed), 37 more were discontinued from clinical evaluation by June 7 (when full compliance with the new regulations was required), and only 17 are being continued. Another firm acknowledges that 90 investigations under way in August, 1962 have been discontinued, 20 of which were almost complete.

Still another company has dropped 30% of its projects though all were rated "good" to "enthusiastic" by research personnel. Other firms report a cutback in a number of projects despite increased research and development expenditures. Two midwestern companies are reported to have closed their research departments. Others are considering the initiation of more research abroad and still others are viewing with interest the possibility of mergers with stronger firms.—Austin Smith, M.D., President, Pharmaceutical Manufacturers Association, to Federal Bar Association meeting, Washington, D.C., June 27, 1963.

Food and Intestinal Obstruction

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SMALL BOWEL obstruction from food is an unusual but important medical emergency. In 1950 Ward-McQuaid[1] published a résumé of 178 cases where food was the cause of intestinal obstruction (Table 1). The incriminated foods fall into at least one of the following types:

1. Rich in fiber (fresh citrus fruits)
2. Take up water readily and swell (dried foods)
3. Relatively resistant to digestive juices (persimmons)

Other important factors noted were poor mastication, no teeth or dentures, and these foods being eaten when the stomach contained no other foods. Recent reports show an increase in obstruction from food following gastric resection.

The records of small bowel obstruction for the past five years in three Indianapolis hospitals were reviewed, and three additional cases of intestinal obstruction from food are reported.

Case Histories

Case I: A 32-year-old Negro male was seen in the emergency ward of the Marion County General Hospital December 28, 1947, complaining of low abdominal discomfort with intermittent epigastric pains. Abdominal examination was not remarkable. His urine contained crystals, white blood count was 14,000 but his temperature was normal. The patient was tender rectally and especially along the left side of the urinary bladder. With a diagnosis of prostatitis, he was treated as an out-patient with sulfathiazole.

He returned the next day complaining of more severe left lower quadrant pains that were recurring about every two minutes. He had been nauseated and had vomited once. The abdomen showed marked guarding with rebound tenderness in both lower quadrants. The seminal vesicles were quite tender. His past history revealed no previous surgery. This time he was admitted to the hospital. The admitting differential diagnoses were: (1) ureteral calculus, (2)

FOODS CAUSING INTESTINAL OBSTRUCTION*

Persimmons	30	(not true food boluses)
Peaches	18	(11 dried)
Oranges	16	
Mushrooms	9	
Bran	8	(3 doubtful)
Apples	7	(3 dried)
Figs	7	
Unspecified fruits	6	(4 dried, 2 baked)
Cherries	6	(some including stones)
Grapes	6	
Beans	5	
Coconut	3	
Potatoes	3	
Apricots	3	(1 dried)
Carrots	3	
Ammunition bread	3	
Oats	3	
Pears	3	(2 dried)
Watermelons	3	(including seeds)
Almonds	2	
Cucumbers	2	
Gooseberries	2	
Grasshoppers	2	
Peanuts	2	
Poppy seeds	2	

One each af banana, banes and peanuts, butter beans, cantalaupe, chicken skins, banes af a chicken faat, fish scales, fruit and peas, garlic bulb, green carn, lettuce leaves, arange and seeds, papcarn, peas and beans, patata and peas, radish and garlic, raisins, sweet patata, prunes, sauerkraut, turtle eggs and watercress.

The mentian af abstructian fram celery, callards ar calewarts, which resemble cabbages but have na heart, has been encauntered, but na actual reference traced.

* The farty-six abstructing faadstuffs are given in arder af frequency. (Madified fram Neil Ward-McQuaid.)

TABLE 1

*From the Department of Radiology, Indiana University Medical Center, Indianapolis.

seminal vesiculitis, (3) intussusception and (4) volvulus.

The day following admission, a plain abdominal film showed dilated segments of proximal jejunum (Figure 1). A barium enema examination was normal. The patient continued to vomit and his recurrent pain became more localized to the mid-abdomen.

On December 31, 1947, his third day of symptoms, the patient was taken to surgery. A large amount of serous fluid was found within the peritoneal cavity and several loops of proximal jejunum were markedly distended. A mass was found impacted in the jejunum at an area of moderate constriction—this segment of narrow jejunum was thought to be congenital—post-surgical examination showed the mass to be portions of undigested orange septa.

The patient was then questioned concerning his food intake. He stated that approximately two hours prior to the onset of cramping, he had eaten an orange on an empty stomach and that he had swallowed it in two or three bites without much chewing. The patient made an uneventful recovery and was discharged. He was lost to follow-up after six months. In retrospect, this patient had an incomplete obstruction during the early part of his illness until the food became impacted at the narrowed site in the jejunum. This converted his illness to a complete small bowel obstruction.

Case II: A seven-week-old white female was admitted to Riley Hospital February 2, 1953 with a history of vomiting for less than 12 hours. The child had had repeated bowel and feeding problems and had not gained weight well. The infant had been discharged recently from another hospital for treatment of an upper respiratory infection. During that hospitalization, she had again been placed on an OLAC formula. (OLAC is a prepared high protein, non-fat milk containing dextrimaltose, corn and vitamins.)

Both physical and x-ray examinations at the time of admission showed evidence of a small bowel obstruction. (Figure 2). She was taken to surgery that day and a putty-like mass of yellowish material was found



FIGURE 1

DILATED, GAS FILLED loops of small bowel are seen in the upper abdomen on a plain abdominal film. Only minimal gas and fecal material is in the colon. This film is typical of mechanical small bowel obstruction.

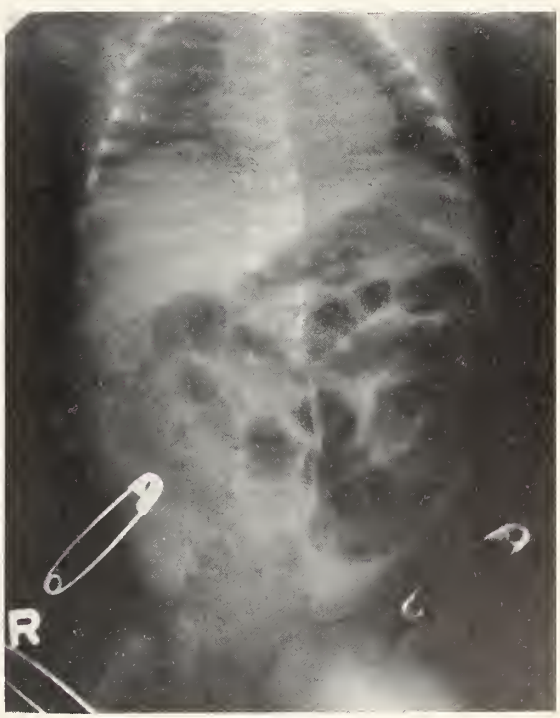


FIGURE 2

GROSS DILATATION of long segments of small bowel without distension of the large bowel is seen on the supine film. Some distension of the stomach is also noted. This combination is characteristic of early distal small bowel obstruction.

about 5 cm. proximal to the ileocecal valve. This was milked into the cecum. A similar mass was found in the mid-ileum obstructing the bowel. This mass was removed by ileotomy, and by test was found to be protein material. The patient was discharged well and proved not to have pancreatic insufficiency as was first suspected. Follow-up a year later in out-patient clinic again showed no evidence of pancreatic insufficiency.

Case III: A 59-year-old white female patient from Central State Hospital was admitted with a diagnosis of mental deficiency, idiopathic, moderate. Vomiting and abdominal distention began three to four days prior to admission on November 30, 1960 to Robert Long Hospital.

Her past history revealed treatment for a fecal impaction six months prior to her admitting illness. There was no previous abdominal surgery. Physical examination showed a moderately distended abdomen which was tympanitic. Bowel sounds were hypoactive with occasional rushes and high pitched sounds. There was no tenderness or guarding. X-rays of the abdomen revealed a mechanical small bowel obstruction. (Figure 3).



FIGURE 3

DILATED, GAS containing segments of the small bowel are noted in the upper abdomen. Minimal gas and fecal material are in the ascending colon. This film is typical of mechanical small bowel obstruction.

Later, on the day of admission, the patient was taken to surgery. The abdomen showed markedly dilated loops of small bowel extending down to a hard obstructive mass in the terminal 6-12 inches of the ileum. The ileum was opened and an intact hickory nut without its hull was found to be the obstructing agent. There was no evidence of any stricture, narrowing or adhesions. Post-operatively, the patient was troubled by an adynamic ileus for approximately three days, but she was discharged in good condition on her eighth hospital day.

Discussion

Bowel obstruction due to food may also occur in patients who have had a partial gastrectomy, and from recent reports this combination is becoming more frequent.[2]

Siefert, in 1930, reported the first case of food obstruction after a partial gastrectomy. By 1955, only six cases had been reported but since then reports have become more frequent. Thirty-three recorded cases of post-gastrectomy obstruction from food appeared in a summary of literature in 1959.[3] Orange pulp was the causative food in 84%. One case had previously had a Billroth I anastomosis, the other 32 had had a Polya modification of the Billroth II operation.

In August 1961, a report from one institution in Sweden reviewed 28 operations on 26 patients from 1951-1960 in which small bowel obstruction occurred from food.[4] All of these patients had had a partial gastrectomy. In 14 cases, the bowel was opened. One case of obstruction was caused by grapefruit pulp, while the other 13 were caused by orange pulp.

In the remaining 14 cases, the patients had had a laparotomy, but the bowel was not opened. Here 12 patients recalled eating oranges as the only probable cause; one recalled an apple and one patient had eaten no unusual food.

Twenty-six patients previously had had a Polya modification of a Billroth II anastomosis—two with antecolic and 24 with a

retrocolic anastomosis. Two patients had had a Billroth I anastomosis.

The exact cause of these obstructive problems is not known since they have occurred following all types of gastric resections. Some investigators think that the absence of a normally functioning pylorus is an important factor in these cases. In any event, it seems prudent that whole citrus fruits should be eliminated from the diet of patients who have had a partial gastrectomy. This precaution is aimed only at excluding the fibrous content of the citrus fruits, not their juices. Another offender in at least one case of obstruction after gastrectomy has been coconut[5]; this fibrous food should also be avoided by these patients.

The area of obstruction in many of the reported cases has been at the site of adhesions, strictures and the origin of a Meckel's diverticulum.[6]

Summary

Three cases are reported in which food acted as a foreign body to produce a small bowel obstruction. None of the cases had had previous abdominal surgery. The three responsible foods were fibrous material from an orange, a hickory nut and precipitated protein from a milk substitute.

Cases of obstruction from food have also been noted following partial gastrectomy. In these cases, fibrous foods (especially whole citrus fruits) have also been the chief offenders and it is suggested that this type of fibrous food be eliminated from the diet of post-gastrectomy patients.

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St. Jude's First Anniversary

St. Jude Hospital in Memphis, Tenn., passed its first anniversary in February as the only institution in the world devoted to research into children's diseases exclusively. A combination treatment and research center, St. Jude has had more than 160 patients, many with leukemia.

The hospital was founded by comedian Danny Thomas to aid leukemia-stricken children, and leukemia research is the chief concern of many of the 16 medical staff members. Each investigator follows his own programs and goals.

Laboratories occupy the ground floor arms of the two-story, star-shaped building; the clinic and wards are in the center. The second floor houses the five members of the Order of St. Francis of Mishawaka, Ind., who work at the hospital. Opened with facilities for 36 patients, the hospital will ultimately have 100 beds.—*Modern Medicine,* March 18, 1963.

Intrathoracic and Substernal Goiter: Some Consideration in Management

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THE GENERAL SURGEON does not have an opportunity to operate on the thyroid gland as often as in former years. But when this structure extends into the mediastinum or thorax, as it uncommonly does, he is called on to investigate these tumor masses, not for their space occupying symptoms alone, but also for accurate identification. In this paper the term retrosternal goiter will be used to indicate those tumors which extend down to and *behind* the upper portion of the sternum and sternoclavicular joints; substernal to those which go down behind this area and into the anterior mediastinum, and intrathoracic to those located anywhere else in the chest cavity.

The diagnosis can usually be established by history and physical examination, aided by anteroposterior and lateral x-ray views of the chest. As a rule, one will find nodular enlargement of the cervical portion of the thyroid, and the vertical elevation of the gland produced by the swallowing act will permit the examiner's fingers to outline retrosternal extensions, thereby causing him to suspect possible true intrathoracic extensions. In some instances, particularly if cervical thyroidectomy has been carried out previously, or in the absence of a neck mass, radioactive iodine ingestion with gammograms will aid in identifying the origin of the tumor mass.

The activity of the glandular masses must be measured, the local condition of the displaced trachea studied, and the motor function of the recurrent nerves observed. Too much emphasis cannot be placed upon the importance of accurate preoperative identification of tumor masses in this area. If they are thyroidal in origin, with the possible exception of those patients who have undergone a previous cervical thyroidectomy, the cervical approach is mandatory.

The treatment of these tumors is surgical removal. Some of them may be over-producing thyroid hormone, some may be malignant, and most of them will be producing symptoms by pressure on the trachea, recurrent laryngeal nerves or other structures. The risk of hemorrhage into these nodules with swelling, edema, compression of the trachea and asphyxiation is real. On the other hand, one occasionally sees a patient with such a goiter, particularly in the right side of the anterior superior mediastinum, who remains asymptomatic for years.

Exacting Preparation

The preoperative preparation is similar to that of all patients undergoing thyroid surgery, except that it must be more exacting. A clear understanding must be established by the operating team, as well as by the patient, that the likelihood of injury to the recurrent laryngeal nerves or parathyroid glands is greater, and cervical tracheostomy is a probability, and that division of the sternum or entry to the thorax a possibility. Since the surgical wound may be contaminated by bacteria if the trachea is opened, therapeutic blood levels of an appropriate antibiotic should be attained prior to induction of anesthesia.

The cervical surgical approach is used in those cases with neck nodules and associated anterior mediastinal masses without previous thyroid surgery. As Colcock[2] has pointed out, even though only one side of the neck contains a mass, or one side of the mediastinum contains the intrathoracic mass, bilateral division of the prethyroid

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muscles should be done for better exposure. A transthoracic approach, perhaps, can best be utilized in those cases having previous cervical thyroidectomy, and in those wherein the mass is located other than in the anterior superior mediastinal space.

In the first instance, this type of tumor may derive its blood supply from the mediastinum, and in the second instance, probably better exposure may be had, but at the risk of having to utilize a second cervical incision in order to control the primary blood supply from the inferior thyroid vessels. Boyd,[1] and Judd,[4] and others have commented on and stressed these considerations, while Johnston and Twente[3] have advocated splitting of the upper portion of the sternum in order to gain more room in which to work. Lahey[5] advocated digital intracapsular, partial homogenization of the colloid-like mass with aspiration and consequent reduction in size, thereby permitting delivery through the cervical-thoracic strait.

In spite of thoughtful efforts to gain good exposure and to control bleeding as the operation progresses profuse hemorrhage will occur at times and it will appear that fatality may result. In such circumstances, the field should be cleared by aspiration, and the large tumor mass be elevated and rapidly removed, keeping finger or blunt instrument dissection against the thyroid capsule. Once the obstructing mass is lifted away, the cavity can be filled with a pack, this later being removed progressively as the visualized bleeding points are dealt with. Injury to the recurrent nerve, transiently manifested and due to edema, or permanent palsy is more common in this procedure, as is also parathyroid gland injury than in standard subtotal thyroidectomy. These facts emphasize the necessity of preoperative planning for such aids as the transfusion of blood and the performance of tracheostomy.

Retrosternal Drainage

Irrigation of the wound at an appropriate point not only removes blood and clots, but aids in the recognition of pleural lacerations or unligated blood vessels. The large retrosternal cavity must be drained. Penrose drains brought out through the wound angles are satisfactory if they are given assistance by gravity, gained by placing the patient on his face and elevating the foot of the bed. Small plastic multiperforated tubes attached to suction ("Hemo-Vac") have not been used by us in this area, although they have been used in radical neck dissections. Theoretically they would seem preferable to other mechanical aids for evacuating air and fluids from these large, dependent cavities.

In the immediate postoperative period more alert and better informed care than usual is recommended for these patients. In the recovery room a tracheostomy set with all accessories, including watchful, interested personnel are constantly at the patient's side. The surgeon should arrange his work so that he is free to see the patient during the first one to two hours of this period. Thyroidectomy patients, for some poorly understood reason, even though euthyroid at the time of surgery, tend to have a noisy awakening from anesthesia. Intelligent sedation at this time may reduce intravascular pressures in the local operative site to the extent that not only the integrity of ligatures are made more secure, but also tracheal swelling and other edema reduced. Swelling may be further minimized by the antihistamines.[6] At an appropriate interval, these patients should be transferred to an intensive care unit for a period of two or three days.

Case Histories

Case I: A 38-year-old white male had a normal chest photofluorogram taken by a mobile TB unit in 1955, but in 1957 a repeat film showed a tumor in the upper chest. His only complaint was of fatigue and a heavy sensation in the left pectoral area. A diffuse enlargement of the thyroid gland was present with a small nodule in the isthmus. His weight was 190 pounds. He did not have a tremor and he appeared euthyroid. X-rays of the chest and barium swallow showed a 10 x 6 cm. anterior mediastinal mass which displaced the trachea to the left, and the esophagus to the left and slightly posteriorly.

I^{131} uptake showed a low normal value

and gammograms indicated the mass probably to be thyroidal in origin. On Sept. 17, 1957 cervical right lobectomy with excision of an 8 x 14 cm. intrathoracic mass presenting more in the right anterior superior mediastinum was done. The sternum was not divided. The pathologist reported the mass to be thyroid tissue and in one portion a "low grade" papillary adenocarcinoma was described. He had a satisfactory postoperative course. No injury to the recurrent laryngeal nerve or parathyroid bodies has been evident, and subsequently he remains euthyroid, without evidence of local recurrence.

Case II: A woman, age 65, had had an enlarged thyroid gland for 15 years, but during the last two years the gland had rapidly increased in size. This had been associated with weight loss, nervousness, awareness of the heart beat and elevated blood pressure. Her blood pressure was 190/72, pulse rate 120, and both lobes of the thyroid gland were visibly enlarged and irregular. The basal metabolic rate was plus 20%, protein-bound iodine 9.9 mg. %, and x-ray of the chest was normal.

She was placed on anti-thyroid drugs, and at the end of ten weeks had gained weight, showed a pulse rate consistently below 100, and in spite of a BMR of plus 30%, was brought to surgery. A total thyroidectomy was carried out through a cervical approach, removing a large multinodular right and left lobe. It became evident that on the left side there was a large intrathoracic extension into the anterior mediastinum, the presence of which had not been fully realized prior to surgery. It was possible to deliver this tumor through the superior thoracic strait and to remove it without alarming hemorrhage. The pathologist reported "benign cystic adenoma of the thyroid gland." Her postoperative course was not associated with thyroid crisis or other complications. The hypothyroid state which we had anticipated could not be proven two months postoperatively.

Case III: A white female, age 56, complained of a lump in the right side of the neck, present for one week. Twenty years previously she had had a subtotal thyroidectomy for what was probably a nontoxic nodular goiter. After this she could not speak above a whisper for four weeks or more. Her voice gradually returned but was hoarse and husky at times, and some shortness of breath with exertion had persisted. Palpitation, tachycardia, weight loss or nervousness had not been noted.

A low transverse cervical surgical scar was present with a 4 x 3 cm. possibly cystic mass attached to the inferior margin of the right lobe of the thyroid gland. The blood cholesterol was 218 mgm. % basal metabolic rate plus 11% and the PBI 3.0 mgm. %. Blood calcium was 9.4 mgm. %, and the chest x-ray showed an anterior mediastinal mass containing some calcifications. The mass extended down to just superior to the hilus of the right lung.

The left vocal cord was thought to be paretic and the right one moved weakly. At the time of surgery, the anesthesiologist noticed that the cords were retracted and he had no difficulty in inserting an endotracheal tube. The operative procedure was carried out through a low collar type incision with preparation having been made to divide the sternum, or to do a thoracotomy if this were needed for adequate exposure.

A small nodule in the right side of the neck was dissected and found to be connected to the retrosternal mass by only a strand of connective tissue. This mass descended into the superior anterior mediastinum and was quite friable and vascular, in spite of the most careful and meticulous dissection, there was profuse bleeding. In view of the rather profound hemorrhage from friable veins, an index finger was inserted into the depth of the mass and it was partially morcellated and removed. The mass was then rapidly resected and removed, keeping the resection close to its capsule.

A large saline pack was rapidly thrust into the depth of the wound and this was progressively removed while individually grasping each large vein as it was encountered and ligating it. One large vessel had torn off the right innominate vein. Fortunately, this was easily secured. The pleura was not torn. Elective prophylactic tracheostomy was considered but not car-

ried out. Her postoperative course was satisfactory. The pathologist reported a benign cystic nodular goiter. Two months later she was found to have a normal serum calcium, no evidence of tetany, to be euthyroid, and to have experienced considerable improvement in her voice.

Summary

The treatment of patients with substernal goiter is usually surgical. An effort should be made to encourage accurate and full identification of this lesion prior to surgery, so that careful plans can be made for its safe technical management. The control of bleeding is the most urgent problem and is best aided by a mature surgical and anesthetic team, permitting rapid removal of overlying bulky masses, thereby clearing the field of vision for direct control of bleeding vessels. Three illustrative cases, one with malignancy, one with hyperfunction, and one with previous cervical thyroidectomy are reported.

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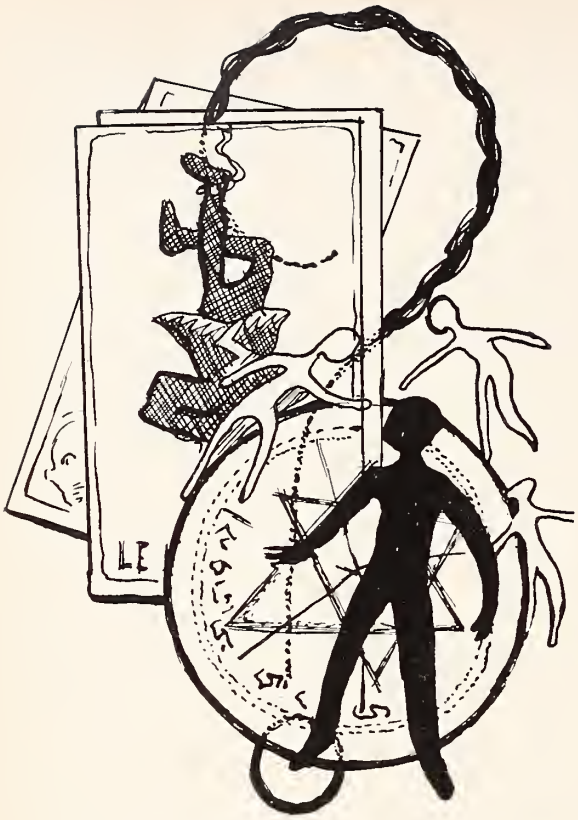
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An Industry Supplied The "Muscle"

The age we live in is rooted in technology. Machines are everywhere and have been devised to do just about everything. These machines and apparatus, and the *expertise* necessary to manage them, were available when antimicrobial agents appeared.

Experts in the processes of fermentation readily converted their methods and apparatus to the production of penicillin; pill-producing machines could be devised for turning out sulfonamides or isoniazid in large quantities; quarters used for the production of antipneumococcic serum from thousands of rabbits served well for animals used to test the efficacy of antibiotics. Behind these elaborate facilities were the resources of the pharmaceutical corporations.

The industrial capitalism that arose in the 18th and 19th centuries in Europe and America supplied the "muscle" in the war on infections, the money needed to run the machines and to hire the workers. We cannot say that no other way would have been possible; we can say that this method was tremendously effective.—Harry F. Dowling, M.D., in *Archives of Internal Medicine*, November, 1962.



The Case of Plethoric Pluri-Perception

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AN OLD HOMILY preaches moderation in all things: a pauper dies of starvation just as surely as the greedy gourmand expires choking on a too large piece of meat, gobbled too voraciously.

Homo sapiens has a distinctive hip-joint, diadochokinesis (rapid alternate apposition of all four fingers to the thumb), and—above all—the tremendous neopallium, the cerebral cortex that is the physical basis of what passes for reason.* The great philosopher, Descartes, said, "cogito ergo sum" —I think, therefore, I exist. Our grandchildren probably will be writing the precise mathematical formulae depicting the biophysics of any given thought.

In the meantime, the neuro-anatomist is busy mapping where is what, the pharmacologist is analyzing drug effects at the synapses and the electroencephalographer is implanting electrodes into the living brain and studying the normal and the pathological. Why do 40 millivolts cycling at 700 oscillations per second produce general anesthesia? Answers to questions such as this will make possible such precise positioning of electrodes to the brain of a newly born infant that encodement of any desired knowledge will become a simple matter. Such a circumvention of schools might do marvelous good; on the other hand, what horror could ensue were postexistent Neros and Hitlers to come into control of the master machines!!

Since ancient days, we have counted the five senses which maintain our contact with the surrounding environment: sight, hearing, taste, smell and touch! Simple! The *sixth* sense was a semi-mysterious (or frivolous) item like, "a woman's intuition," "astrologer's horoscope" or what have you. Of course, we have known for quite some time that the eighth cranial nerve is really two completely separate entities: the cochlear or hearing portion and the vestibular or equilibratory division. We hear with the former and respond to gravity with the latter—which way is up? For some reason or other, no one has gone to the trouble of considering the ability to balance as a *sixth* sense.

There is a steadily enlarging accumula-

* The June, 1963 issue of *Life* had a good teaching discussion of just this topic.

tion of animal studies giving us some insight on senses not possessed by Homo sapiens. Until just yesterday, we could not understand the structures nestled in the ears of bats—nor could we comprehend how they could fly so surely in total darkness. Sonar is a discovery of World War II; the marvel of the bat, in Stygian gloom, snatching surely an insect while in flight is now, at least, comprehensible.

How does a salmon find its way from the depths of the ocean back to the precise brook where it was spawned? How does an eel find its way back to the Sargasso Sea? The Arctic tern flies unerringly from one polar region to the other—and back again. Do these creatures have built-in gyrocompasses or do they sense (with which sense?) the earth's geomagnetic waves? Do electric battery equipped fishes possess capabilities of this type? As yet, Homo sapiens does not know.

Before Einstein had been born, James Clerk-Maxwell described the entire electromagnetic spectrum of waves. In this century, Marconi made radio practical; Lee De Forest and Zworykin brought television to the home screen. Modern electronic devices make instantaneous communication from here to there and back again commonplace.

An Iconoclastic Inquisitor

"And, doctor! What number would you assign to whatever sense it is that responds to the cosmic rays streaming from the sun's flares and spots? And what do our vaunted scientists really know about Circadian rhythms? What sets the clock on so familiar a phenomenon as a woman's menstrual cycle?"

"And—bright boy! What sense tells the sea turtle just when to rise from the breakers at precisely the full of the moon, drag her enormous carapace above the high tide line and proceed, immediately to industriously scoop out a nest into which she will then deposit her fertilized eggs?"

"And—profound scholar! What about paramagnetic resonance as exhibited by as simple a life form as the algae? Let us assume your ignorance of quantum physics! Just let me put it as simply as even your feeble intellect could be expected to understand. Just take for granted that there are quasi-particles called *bosons;* photons are in this group and the value of their spin is always integral: 0, 1, 2, etc. . . .

"Then there is another, more substantial class of particles called fermions; electrons belong here; the value of *their* spin is always *one-half* integral: thus, 1/2, 3/2, 5/2, etc.; the numerator changes while the denominator is unaltered. Now, even you should know that photosynthesis is basic to all life processes. During the photosynthetic reaction, the strong photo-reductant effect goes pari-passu with the functional release of molecular oxygen. Now, listen carefully! According to our agreed definition, these two, light induced, electron paramagnetic resonances are SENSED by this simplest of organisms. You and I do *not* possess this particular sense—WHAT or WHICH sense, my paragon of knowledge?"*

Bat Bux shifted his hips, settled more comfortably on the edge of the cell cot that he was using as a seat and pointed his long, questioning finger at me. I was occupying the only available stool. Bat was still the tall, heftily muscled athlete I had known since our grammar school days. Even now, there was only the barest touch of grey in his thicket of well-combed black wavy hair. The nose was aquiline, thin and curved like an eagle's beak. The keenly intelligent, cat-green eyes gazed with insolent intolerance from under the heavily drooping, long-lashed lids. The tufted eyebrows and bristling mustache combined to give an almost feral leer to his somehow sinister smile. He bared brilliant, fang-like teeth just covered

* Just lately I have learned that this paramagnetic resonance will find use in the D.D. of Obstructive vs. Hepato-Cellular types of jaundice! Free radicles increase markedly in the obstructive type; they have the half integral spin of the fermions. When a scan of the liver detects more than 0.4 x 10M of free radicles per gram of liver tissue, the presumption of obstruction is raised. The equipment used is relatively simple; it has a microwave energy of 9000 megacycles/sec. at an external magnetic field of about 3000 gauss. Not yet practical but, surely, a most fascinating thought. . . .

Also, the recent report of Rosa Kuleshkova, the woman from the Russian Urals, who can distinguish colors and actually *read* with her fingers only!

by thin, imperiously curving lips: a short tempered, deadly dangerous antagonist—be the weapons merely the words of decorous debate or be they rapiers or even heavy manacles!

We had been sitting for many minutes discussing the issues I have summarized above. Bat had been just a couple of years ahead of me in school. A brilliant Phi Beta Kappa in physics and mathematics, a letter man in basketball and boxing, a terrific word-tosser who seemed to take perverse delight in taking the hated, controversial side of a debate—and winning. . . . And then the less publicized but still all too well known darker side: the ungovernable temper, the time he got shot in the back (by accident?) by one of his own men that he was leading in battle—other, most unsavory tales. . . .

An Excursion into Evolution

It had been a couple of decades since I had last seen him in the flesh. My mission with him seemed almost a side issue as we continued our animated talk. Really, it was Bat lecturing and yours truly inserting an occasional interjection. We agreed that *ALL* communication consisted essentially in the sending of a message decoded by the recipient's whatever sense. Ancient man might have thought a walkie-talkie the work of God or devil; today, we accept as commonplace the sight of a chap sitting in the park and listening to a broadcast on his transistor radio.

I was also in full agreement with the monologist that the Darwinian theory was explicit in its acceptance of the *evolutionary* development of new organs. Quite obviously, the shrew-like original mammal was not the *immediate* ancestor of present-day man. Many hundreds of gradually evolving creatures survived the evolutionary process before Homo sapiens appeared. I had to concede that we could not say that we are a finished product; quite possibly—nay, almost certainly—the brain is an organ still growing and perfecting itself.

Yes! It was undeniable that Einstein's "Beautiful Order of the Universe"—GOD or whatever you call it—frequently used modalities that seemed incomprehensible to our still fallible minds. Yes! I had heard of chelation! Yes, it was indeed awesome to contemplate the rare metal, cobalt, forming the nucleus of cyanocobalamin, the B_{12} vitamin indispensable for life. WHY? Man had to have the humility to acknowledge his incomprehension of this frustrating molecule and the wonders it wrought.

"Now, Arnie, my boy! Suppose that the Deity had decided to build into our nervous systems a transmitter *and* a short wave receiver? Would He put it full-blown into the immediate descendant of a human being that had lacked it totally? He did not put our present neopallium into the direct immediate descendant of that first mammal, did he?"

"Granted that analogy is dangerous—still, as Dr. Conan Doyle's Professor Challenger told *his* listeners: 'Let us try it.' Suppose a *few* better endowed, more brainy human beings of the presently living generation have selenium or germanium transistor-like elements inserted into them. Never mind the precise DNA mutations: just *assume* them. I can even envisage the axons of the long pyramidal cells of Betz being used as antennae. NOW guys like Hurkos and Dunninger make *some* sense; or do you still think of them as pure charlatans?"

"There Are More Things in Heaven and Earth . . ."

"And take that card shuffling friend of ours, J. B. Rhine. Of course, I squirm at that moronic term he uses, ESP, extra sensory perception! Possibly as yet unlabelled, but *a* sense has to be involved: by definition. Also, that card riffling technic is sheer idiocy: a blind cul-de-sac, if ever I saw one. But his premise is sound and your scepticism is proof of your reactionary bigotry!"

"Now, let me give you a couple of my own personal experiences; you'll have to take my word for their validity. I am on the West coast; ten years of my happy marriage have gone by; don't scoff! It was VERY happy! Suddenly, I awake hearing a former girl friend calling me. I had put her from my mind this entire decade. She is using the pet nickname she had reserved

for me. She wants desperately for me to come and hold her hand! She has been knocked down by a passing truck and is in terrible agony that very minute! The message fades into a gabble of dit-dats. I am startled sufficiently to pursue the matter further. Discreet inquiries confirm an astonishing fact; allowing for the three hours between the time zones, that woman HAD been hurt in an accident at just THAT precise time. . . ."

"And another, 'dream', shall we say? My kid brother was on a submarine while I was in the Ardennes. I loved him even if he christened me, 'Bat' a cognomen I have had to live with no matter how much I loathe it. I am having troubles of my own —you remember Bastogne and that 'Nuts to you' stuff? Well, all at once, I hear clearly my brother *shrieking* to me, 'Bat! Goody-bye, Bat! That depth charge got us! We are leaking like a sieve!' "

"It *could* have been an hallucination but his submarine never did return from that last patrol; and the last message it sent was just *two* hours before I HEARD my brother; shrug that timing off, if you dare!" Bat glared at me challengingly; he had raised his voice and I could see the guard outside rise and come close to the heavily barred door to peer in.

Even as I waved the uniform away, I lowered my voice and almost purred in a one key monotone (it is a *good* technic—better than a tranquilizer). "Now Bat! The next thing you'll tell me is that Mark Twain was really able to foretell *his* brother's accidental drowning? And that Abe Lincoln's well-documented dream concerning his own approaching assassination and funeral was really more than a harassed man's morbid broodings?"

"You know, Bat—we will not discuss mushroom and mescal induced hallucinations here. I'll concede that the recently discovered growth gradient determining compounds are simple cyclo-pentene compounds; but—still. . . . Of course, I'll grant you that the Catholic church accepts visions and miracles as proofs of sainthood and Divinity. I'll go even further and tell you that I know well a woman who talks with



Jesus every Sunday a.m.: precisely at nine o'clock Midwestern time."*

Bat had had to lean forward to hear my whispering; his mood had altered completely yet again; he was not geared for listening. Imperiously, he snorted his contempt, "Look! I'm *NOT* planning to cop any plea of insanity to get out of this." The arrogant airiness of his well trimmed, clean fingers embraced the solid contours of his grim dungeon. "But, you dope! *How* did I know *where* Sally and that pimping paramour of hers had holed in? I was TUNED in on her, I tell you—you ignorant nincompoop!"

A Perceptive Phonomaniac

"And, how in hell do I know what you are saying to yourself just now, *You* be careful: If you don't know it already, *your* nervous system is just as well endowed as mine is! Shall I repeat to you what you said to Judge Jenkins when he called you in? No! I don't know what the governor said to you when you were asked to examine me to guide him re commutation of my sentence or not!"

Even as Bat stared keenly at me, he shrugged his shoulders in growing disgust. "You *are* a dope! You specialists give me

* The Case of Sacerdotal Confusion. *JISMA* 7:1030-1035, 1961.



a pain in the neck! You preen yourself on having heard the word, auxanology; you are dead wrong in the bit you know re the rare metals. Go away! Tell the judge *and* the governor that they are dopes, too! I'll confess that I AM sorry that I chopped up that whoring hussy of mine; I miss her—funny, isn't it? Just use that dim wit of yours to some purpose; *HOW* do I know what you are thinking about?" Bat stretched out on his cot and squarely turned his back to me; I was dismissed without the barest courtesy of a good-bye.

The guard came and cautiously unlocked the padlocked door. Standing outside, he let me pass into the corridor and then quickly slammed the heavy door shut. In his broadest Irish brogue, he said, "That is a bad 'un; a *manic-sadist* the D.A. called him. Holy Mother of God, Virgin Mary!" He raised his right hand in supplication and crossed himself even as he passed me through other gates and, finally, into the main corridor of the prison.

"The Proper Study of Mankind Is Man"

As an internist with a broad background of psychiatric experience, I still had been almost shanghai'ed into my present mission. Many better men than I had presented, in extenso, the pros and cons of Bat's sanity—or insanity—at the famous trial. A vile temper is *NOT* prima facie proof of manic-depressive insanity. There was the matter of the Unwritten Law (even if Bat had been obstinate in refusing that way out). True, it was no small matter to catch your passionately beloved in flagrante delicto with a two-bit gigolo. However, chopping them both up, stuffing the corpses into a trunk *and* shipping the contents to your mother-in-law *DID* smack of some premeditation long after the most hellish tantrum fit should have cooled—or did it?

The presiding judge at the trial had been a chess partner of mine for many years. He had known Bat and HIS family; he had known me and my background. He did not altogether trust the high falutin' imported medical and legal lights that had held so many wrangles beneath the dais from which he listened to the lengthy proceedings. When the governor had asked the judge as to *what* medico to pick for advice re the condemned criminal, I was chosen precisely because I was still a part of my home town even if my official residence was elsewhere. In his long distance call, the judge told me that a *one* page summary was wanted as to what I thought of Bat Bux: the boy with whom I had grown up and who had been in school with me. Not even my wife or my office knew where I had gone; messages for me were relayed from a hospital in another town where I had been called ostensibly to see a patient in consultation.

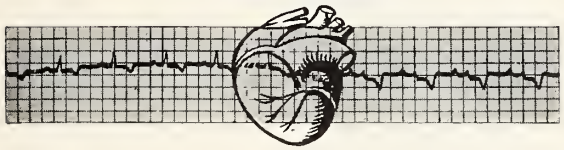
The Lady or the Tiger? Doctor! None of that obfuscating lengthy medical lingo! Answer me, yes or no! Have you stopped beating your wife?

With hesitant steps, slowly and thoughtfully, I went up the court house steps and to the judge's chambers. Somberly, soul-searchingly, most soberly and with humble prayer in my heart—the one page was hand written, re-written, typed, put into a sealed envelope and given to His Honor personally.

Was my summation right? The years drone by—and still I wonder. . . . Is it better to be a dull-witted stolid peasant or can a *plethora* of perceptions be too much for normal sanity??? ◄

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New York, N. Y.

Electrocardiogram of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Krannert Heart Research Institute, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

S_2 S_3 Pattern

CHARLES FISCH, M.D.
Indianapolis

THE S_2 S_3 pattern implies that the S exceeds R in leads II and III. In such instances the QRS axis lies farther to the left than –30°. This pattern is a rare finding in young healthy subjects. Its incidence among healthy subjects over 40 is also rare, increasing slightly with age. It nearly always suggests disease of myocardium in the anterolateral aspect of the left ventricle.

The tracings reproduced in Figures 1 and 2 were recorded within a short period of time on individuals with a classical history of angina pectoris.

Figure 1, L-333146. S_2 and S_3 exceed in amplitude their respective R waves. The axis of the QRS is in excess of –60°. In addition T waves are low or inverted in I, AVL, AVF, V_3 - V_6. Marked clockwise rotation and axis as seen here is occasionally seen in emphysema. However, the T wave changes are more in keeping with coronary disease, and the low P in III tends to rule out emphysema.

L-334085. S_2 and S_3 exceed the R and leads II and III. QRS measures .11 seconds suggesting intraventricular conduction delay. The Q in I, AVL, V_5, V_6, and inverted T in I, AVL, V_5, V_6 are compatible with an anterolateral infarction. The pattern seen in this tracing is known as peri-infarction block.

Figure 2, L-334511. The S_2 and S_3 exceed their respective R waves. No other significant abnormalities are present.

L-255807. The S_2 and S_3 are of larger magnitude than the R waves in leads II and III. Presence of heart disease is supported by the ST-T depression in leads I, AVL, V_4, V_5, V_6.

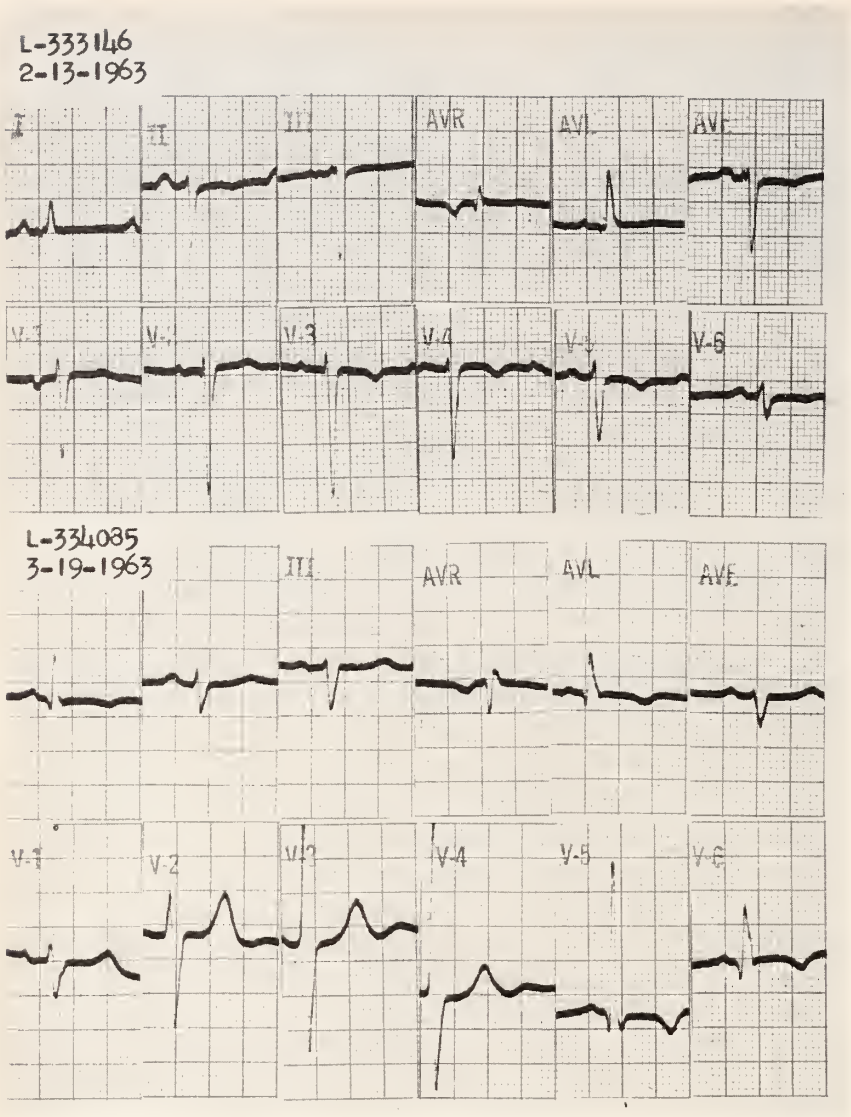


FIGURE 1

TRACINGS OBTAINED in two patients with clinical evidence of coronary disease, demonstrating the S_2 S_3 pattern. For details see text.

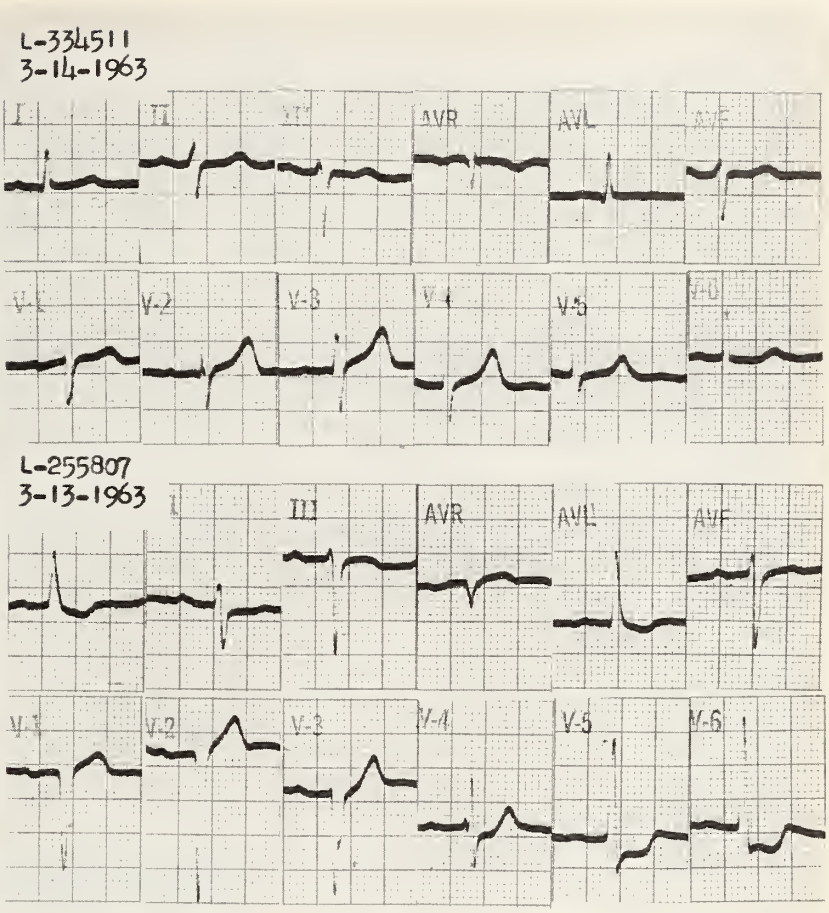


FIGURE 2

S_2 S_3 pattern. For details see text.

X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

Endometriosis of the Ureter

DALE B. PARSHALL, M.D.
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EDWARD G. DOVEY, M.D.
Elkhart

THE PATIENT developed a sudden sharp continuous pain in the left lumbar area of the back and in the left lateral abdominal area, with chills and fever. There was no burning pain, or frequency of urination. Menstrual history was normal, although she did have some pain in the left back and left abdomen with her menses. Four to five years ago she had a previous GU tract infection, but no history of stone.

Her past medical history and family history were non-contributory and inventory by systems showed nothing significant. Physical examination showed a well developed white female with acute pain in the lumbar area. Anterior abdominal wall was flat with no scars. There was definite tenderness over the left kidney posteriorly and definite tenderness in the left lateral abdominal area and left lower quadrant. There were no masses palpable. Rectal examination was normal.

In 1954, at the time of the previous GU tract infection, the patient had had an intravenous urogram done which was normal. An intravenous urogram was done the day after the present admission and showed delayed excretion on the left side with hydronephrosis and hydroureter (Figure 1). An erect film was made which showed ureteral dilatation down to the pelvic area on the left side where there was a density which was felt to represent a possible calculus.

The patient was examined by cystoscopy on November 13, 1961, but the ureter could not be catheterized and no definite calculus



FIGURE 1
NOTE IRREGULAR filling defect in distal segment of ureter.

* From the Elkhart Hospital.

could be seen on this examination. The patient was re-examined on November 20, 1961, at which time a bulb catheter was placed in the lower left ureter and opaque material injected which demonstrated a definite narrowing of the ureter measuring approximately two cm. in length above which the ureter was dilated. Below this level, the ureter appeared to be within normal limits. A final examination showed two ureteral catheters introduced into the upper ureter.

This patient was operated on November 22, 1961, at which time it was found impossible to retract the peritoneum and its contents far enough medially to expose the right ureter. The peritoneum was opened and inspected from the inside. The uterus appeared normal, as did the remainder of the pelvic organs. The ureter could be seen beneath the peritoneum through a large amount of scar tissue. The ureter was exposed throughout its whole course. The true and false pelvis and the ureter were dissected free from the scar tissue and resected from a point just above this stricture area down to and including the ureteral oriphysis in the bladder. The remaining ureter was then reimplanted in the bladder.

The pathological diagnosis was endometriosis with classical endometrial glands complete with stroma and with some hemorrhage. Subsequent intravenous urograms done on December 2, 1961, January 22, 1962 and October 26, 1962 showed the left kidney to be functioning normally with regression of the hydronephrosis. ◄

The Federal Government—Sole Employer?

There is more and more government interference in the conduct of one's private affairs; more and more tendency to want to rely on the government instead of doing it oneself; more and more whittling away at the private enterprise system; more and more feeling that business is irresponsible and the professional naive.

The government's civilian payroll hit a record high of $14 billion in the last fiscal year, and the first month of the new fiscal year has shown an increase of 14,530 employees over the preceding month, for a total of two and a half million federal employees on the payroll. Thirty of the states have more federal employees than state employees.

Maurice Stans, former Director of the Budget, has reported that every worker in the country will be employed by the Federal Government by the year 2058 if the growth rate of Federal employment of the last 30 years continues into the future.—Austin Smith, M.D., President, Pharmaceutical Manufacturers Association, to National Association of Chain Drugstores, Oct. 25, 1962.

The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

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Genes and Immunity

17th Clinical Meeting of the American Medical Association

AN OUTSTANDING feature of the 17th Clinical Meeting of the American Medical Association Dec. 1-4 at Portland, Ore., will be a symposium on "Genes, Chromosomes and Immune Mechanisms."

The symposium will be held on Monday, Dec. 2, the second day of the meeting. The same subject will be covered in a guest lecture on Tuesday morning by Rupert E. Billingham, Ph.D., of the Wistar Institute, Philadelphia, a world authority on tissue immunity. He collaborated with Peter Brian Medawar, of London, who won the Nobel Prize in Medicine in 1960.

Dr. Medawar received the Nobel Prize for his distinguished contributions to the baffling but highly promising field of tissue transplantation and acquired immunologic tolerance. His main work was concerned with problems of tissue grafting and with tissue inheritance and differentiation. In 1948, at the request of the Medical Research Council, he undertook, with Dr. Billingham and other associates, tissue grafting in cattle to determine the distinction between identical and non-identical twins.

In the course of these and other investigations, he confirmed the theories of the noted Australian scientist, Sir Macfarlane Burnet, with whom he shared the Nobel Prize.

Joining in a panel discussion on genes, chromosomes and immune diseases late Monday afternoon will be Drs. Robert Koler, moderator, Portland; Levin Grumbach, New York; Arno Motulsky, Seattle; Carl Pearson, Los Angeles, and Robert Blizzard, Baltimore.

Immunization, with special emphasis on the viruses, will be covered on Tuesday's program, along with cancer of the breast.

Outstanding authorities in the diagnosis and treatment of breast cancer will exchange ideas and discuss the newest forms of treatment. The physicians are Drs. Ian Macdonald and Richard Martin of the M.D. Anderson Hospital in Houston, and Dr. Maurice Lenz, emeritus professor of radiology at Columbia Presbyterian Hospital, New York.

Also on Tuesday a number of outstanding

specialists will discuss the surgical aspects of infection. The doctors include William Kirby of Seattle; Jacob Fine of Boston; and Edwin J. Pulaski of Washington, D. C. They along with Dr. J. E. Dunphy, of Portland, president-elect of the American College of Surgeons, will close this portion of the program with a panel discussion.

Another highlight of the scientific program will be a day-long Tuesday program on kidney problems, including the newest thoughts on kidney acid-base control. A renal symposium will include an airing of the principles of intermittent dialysis as well as the socio-economic problems associated with keeping such chronic uremic patients alive. Speakers and panel discussants include Drs. William B. Schwartz, Jr., Boston; Belding Scribner, S. T. Boen, and John S. Murray, all of Seattle.

Guest Editorials

1963 Diabetes Detection Drive

NOVEMBER 17-23 has been designated diabetes week by the American Diabetes Association.

The American Diabetes Association and its member associations at state, county and local levels throughout the nation have organized a splendid program designed to educate the lay public regarding diabetes mellitus and its significance. The keystone around which the educational aspect of the campaign is constructed is the Diabetes Detection Drive which in most areas runs concurrently with diabetes week.

It is estimated that there are approximately 1,400,000 cases of undiagnosed diabetes in this country at the present time. This is not surprising in view of the fact that many individuals do not seek medical consultation early in the course of their disease. Furthermore, the frequency with which diabetes is diagnosed as part of a more comprehensive medical examination when it was initially unsuspected by the physician, attests to the insidious nature of the disease and its elusive character at the diagnostic level.

For these reasons it is hoped that a screening technic for diabetes, applied on a mass scale and made available to the general population, will materially assist in reducing the number of undiagnosed cases of diabetes.

To this end, the American Diabetes Association sponsors the use of "Dreypak," a diabetes test strip, which comes complete with instructions regarding use and mailing procedure. The individual needs only to invest two 5 cent postage stamps and the time required to apply a two hour postprandial urine specimen adequately to the test strip in order to learn whether or not he is diabetic. Such test strips are mailed to the testing center, from which a confidential report is returned to the individual if the test result is negative.

Positive tests for urine sugar are returned both to the patient and to his family physician, who is identified on the test strip by the individual at the time the specimen is collected.

Diabetes is dangerous or serious *only* when it remains undiagnosed! We urge you to participate with your local medical societies and diabetes associations in their efforts to detect the unknown diabetic. It is not too late for you to obtain "Dreypak" diabetes test strips at a nominal cost for free distribution in your reception room during diabetes week, Nov. 17-23. "Dreypak" units, as well as information and assistance on organizing a diabetes detection drive in your community are available upon request from the American Diabetes Association, Inc., 1 East 45th St., New York 17.

The challenge is clear, but it cannot be successfully met without the organized cooperation of you and your fellow physicians in instituting a Diabetes Detection Drive in your community.

Richard J. McAlpine, M.D.
Co-chairman
Diabetes Detection Drive
Indianapolis Diabetes Association

"Old Rocking Chair" A New Therapeutic Tool

THE INCREASING popularity of rocking chairs during the past 15 years finds sound physiological basis in the minds of modern medicine. Physicians, surgeons and physical therapists recommend their use for a wide variety of application and more and more rocking chairs are to be seen in hospital rooms and rehabilitation units.

In one large surgical unit, two extremely comfortable rockers have held their place for more than 20 years. Here between cases, surgeons practice what they preach in the way of rest, relaxation and contemplation. Business executives are beginning to follow a similar pattern.

A favored technic for quieting babies from time immemorial, the gentle rocking motion has a sedative effect to all age groups and has done much to order and orient the thoughts of troubled men and women throughout the years.

From earliest colonial times, when many of our present chair patterns took origin, the rocking chair has served many of our Presidents well indeed. Andrew Jackson used much the same chair as our own President Kennedy and Lincoln showed strong preferences to the high backed Boston type.

Perhaps the basic benefit of the rocker is that of gently stimulating muscle contraction and thereby improving peripheral circulation.

There is a very low caloric cost expended (100-150 calories per hour) which is about one-half that of walking or cycling and less than one-third that of horseback riding. Yet because of the longer duration, the total muscular effort is greater and better tolerated by the aged, infirm or convalescent.

It is extremely rare for a habitual rocker to have swollen feet and legs and this undoubtedly is one of the greatest benefits to the aged. When combined with knitting or friendly conversation, the caloric or energy expenditure is equal to light housework or light industrial activity, and so with no apparent effort—a healthful exercise program is achieved.

Noteworthy too is the tonic effect on cardiovascular function. Weakness, dizziness, and fainting in the convalescent soon disappear with sitting practice and this is greatly enhanced by the rocking motion. Pulse rates slow, appetite improves, anxiety lessens and interest in others increases. Wheelchairs are often employed but it is significant that leg elevators are usually required to prevent swelling of the feet. Active effort with legs and arms add much to this early convalescent period.

Benefits to joints from rocking chairs are well recognized and are more and more a part of orthopaedic rehabilitation programs. The patient with knitting bones, stiffened joints, or weakened muscles, derives welcome relief to discomfort, increasing range of motion and improving muscle function from the gentle effects of rocking. Arthritics have found the age-old activities of rocking chair and needlework to be high on the list of therapeutic endeavors.

Aching backs and sciatica which plague so many also are helped by the flexed position and gentle motion of a well fitted rocker. Perhaps this is one of the greatest therapeutic indications of the rocking chair for this is the position and this is the motion which is basic to all casts, braces and exercise programs employed in lowback treatment.

Here, easy entry and exit, speed and range of excursion, and essential stability are factors in design which, added to anatomic fit and acceptable appearance, challenge the modern designer and manufacturer.

Thus it seems that a troubled world which clamors for sedation, complains of stiffened joints and sagging muscles, demands pain relief, yearns for physical fitness, and yet needs serenity, security and opportunity for contemplation, might well sit and rock awhile. These physiologic lessons from the very young and the very old point the way.

Who knows—the old front porch may make a comeback as well.

Carl D. Martz, M.D.
Indianapolis

"Mirror, Mirror on the Wall"

WHEN I WAS a youngster, the word "doctor" always brought to mind a plain, square house at a street corner in a middle-class residential area, a brass sign on the front door, a clean white coat to which a faint antiseptic odour clung, and a smiling, short, balding man whose quiet greeting and gentle manner quickly slowed the pounding in my throat and rid me of my fears.

This childhood recollection and an adolescent hero worship inspired by a devoted Latin teacher's gift of a book on the great historical figures in medicine were the two great influences which led me into the study of medicine.

And, through the years, understandably enough, the word "doctor" reflected in the mirror of my memory the image of the kindly doctor and of the great figures in medical history, intermingled with that of my Latin teacher.

The doctor's image is a subject of much discussion these days. To many he is a brusque, handsome, forceful Sir Galahad on the TV screen. To some he is a suave, immaculately dressed, greying man driving a Cadillac up to his luxurious house. To others he is a masked, gowned figure peering down from a background of bright overhead operating lights. To others he stands for summer camp examinations, needles and shots, and lollipops.

To a few he stands for everything wonderful, admirable, exciting and omniscient. He is the embodiment of all girlhood dreams of the perfect man, handsome, gentle, kind, and ever so romantic. He is the man above all others who is best informed concerning all phases of living. He is the man who has well-trained children, the most ladylike wife, the friendliest, best-managed household. He is the epitome of perfection.

All these, of course, are popular, stereotyped images mentioned in conversations and portrayed in one way or another by the press, radio and screen. And, as common as these images are, yet we all know that the doctor is something very different and substantial. Over the years in which my thoughts have been attuned to medicine I have encountered many descriptions of doctors. None has appealed to me quite as much as the following which I have taken the liberty of adapting from a 14-year-old Chicago miss whose ambition is to become a doctor some day.

"A doctor is a man with the sensitive hands of a woman, or a woman with the courage and strength of a man. He is unhaunted by the past, optimistic of the future, and busy in the present carrying on with his work of mercy as no other person can.

"To the little child the doctor is a gentle hand that heals the soreness in his small limbs and the fear in his heart. The adolescent respects and admires him as someone upon whom he can rely for advice and counsel on how to lead a long, happy and healthy life. To the anxious young mother he is an angel who appeared in the night, with a black bag, and miraculously cured her baby of a high fever. To the dying man he is a faithful friend giving him the assurance that he will be with him to the end, still holding his hand as he moves on to his final reward.

"A doctor is all this and more. He is always up-to-date, never obsolete, and he will always be on hand to care for you when it seems no one else cares. He is a veritable Midas with a vast storehouse of joy, health and happiness to give to all, and in so giving he finds his happiness. For he is a doctor."

I am certain that we might find more elegant definitions of a doctor, if we look long enough. But I am equally certain that we would be hard put to find one as eloquent as the above from a little Chicago miss called Katherine.*

George X. Trimble, M.D.
Director of Medical Education,
The Memorial Hospital of Long Beach,
Long Beach 6, California, U.S.A.

Reprinted from the *Canad. Med. Assn. J.*, Feb. 2, 1963.

*Smile a While: *JAMA*, 182:262, 1962.

House Staff Exploitation—Fact or Fiction?

"Be not the first by whom the new are tried,
Nor yet the last to lay the old aside."

—Alexander Pope

POSTGRADUATE TRAINING has been well-established for many decades as the modality whereby recent medical school graduates are transformed from didactically-prepared students to smooth functioning clinicians. A few members of each class will deviate from pure clinical aspirations to become teachers, research investigators, administrators, or directors of medical education. An even smaller number engage in the pursuit of other extra-clinical variants. The majority, however, are preparing for practice, and a period of intensive *practical* attack on clinical problems is essential. This may vary from a single year's internship, preparatory for general practice, to a half-dozen years' residency in some surgical field. Regardless of the medical objective the basic premise of repeated exposure to *actual* patients embodying diagnosis and treatment with the responsibility that this entails is essential. And it follows logically, discounting individual variations such as inherent ability, energy, drive, ambition and desire, that the young physician who sees, palpates, observes, and treats the most patients will be the best prepared.

A well-balanced program including lectures, conferences, movies, symposia, and other teaching media is necessary but none of these can supplant repeated supervised patient examinations, diagnoses, and treatments. Unfortunately for the immature doctor, and even worse for his patients of the future, a growing tide of enthusiasm among those directing the fortunes of medical education is attempting to "protect" the house doctor from alleged abuses of all types but particularly from "overwork." They seem to rationalize that he can be taught clinical experience by occasional *selected* patient contact emphasizing the rare to the exclusion of the frequent. Responsibility, judgment and dedication, those essential but intangible ingredients of the true physician, are emphasized little if at all either by teaching or example. In recent years, therefore it has become fashionable in more influential medical circles to disparage, ignore, or eliminate many of the facets of intern and resident training historically proven to produce good physicians.

Much of this current vogue results from the keen competition among hospitals for the services of these young doctors, and the inducements often offered the recent graduate have soared astronomically both professionally and financially. Indeed, amazing as it may seem, such juicy enticements as country club membership, lucrative positions for the wife, free insurance policies, discounts on clothing and groceries, and even paid-up baby sitters are not unheard of in attracting interns. At the same time fashionable rent-free apartments in addition to a salary, envied by many of the young attendings, is more or less routine for the "struggling" house physician.

Certainly, as in the case of labor reform, many improvements have long been in order, but one conjectures as in the case of the former, if possibly we have not overcorrected and over-compensated. For many years it has been thought that hard work involving clinical problems was the *piece de resistance* of training rather than souped up lectures, medical movies, complete segregation from private patients, and a continued emphasis on giving the house staff less and less work and responsibility. It is time to evaluate this novel policy, which does not conform at all with the lofty precepts of medicine. Cursory observation reveals the physician, "trained" under this almost *laissez faire* concept, to be woefully inadequate for the problems of medical practice.

The average potential house doctor, and, of course, there are exceptions, is primarily interested nowadays in two features—salary and the amount of leisure time available in a particular program. Somewhere down the line, but with a much lower priority, an evaluation of the characteristics and opportunities of the training available may be requested. Incidentally, since he has already been research-oriented, he may be inter-

ested more in the experimental than the clinical laboratory facilities. Although it has been demonstrated for years that opportunity is wasted unless call is taken every other night, a more liberal nocturnal and week-end schedule is often demanded. In many hospitals emancipation from as many night, week-end, and holiday calls as possible is in effect, this being an added inducement.

Exclusive of salary and leisure time, the question of private patient relationship and responsibility seems next in importance. Hospital administrators, directors of medical education, medical school advisors and others have often promulgated the concept that the private patient has *no* role in graduate training, and that the house physician should never be requested to perform any services for them. Indeed, this alleged and greatly magnified misconception may be paramount in the evaluation of the institution by the latent intern or resident. This asserted doctrine of implied exploitation by the private physician is wrecking the training program of many of our hospitals, is lessening the quality of private patient care, and is eliminating one vast area of rich and rewarding training.

A well-supervised clinic service is admittedly the most important and probably the best single factor in postgraduate training but the fact remains that virtually all of our hospitals including those with medical school affiliations are "mixed"—that is, part clinic and part private. Indeed, in most institutions not eligible for federal and/or state funds or vast grants, the private patient usually "carries the freight" for the clinic service. Furthermore, much of the best pathology is seen on the private service as well as examples of superior treatment and care. A conscientious physician who is a good and interested teacher will advance knowledge and skill far more rapidly on his private patients than the groping and uncertainty often encountered on a poorly managed clinic service. This is not an apology for the private physician who expects the house staff to help with his private patients and who gives nothing in return. Properly employed, the private patient is a golden source of excellent training. This medium should not be neglected.

A reversal therefore of many of the current trends in graduate education is highly necessary. Hard work and long hours are the school for the physician who would become proficient. To label this as exploitation is to produce a generation of medically sterile and ineffective doctors. A balanced program with the essential emphasis on *clinical contact* under expert but firm guidance is mandatory and ideally includes clinic and private patients. Adjunctive didactic instruction is worthwhile and necessary, but is *no* substitute for the acquisition of clinical experience.

Charles E. Davis, Jr., M.D.
Norfolk, Virginia

Reprinted from the *Virginia Medical Monthly*, June, 1963.

Editorial Notes . . .

Polls taken by members of Congress among their constituents are highly informative. Many such polls taken in recent years have been on the subject of King-Anderson type legislation. Almost all polls show a majority against King-Anderson. The total of all polls last year showed 54% against. The total to August 2 this year upped the opposition to 64%.

The Sears-Roebuck Foundation in their July *News Letter* described again the dedication ceremonies in July for the medical center at Roachdale, Indiana. This facility is now occupied by Dr. Robert Hales. The Foundation also announced the receipt of an application for a survey at Mulberry, Indiana. The survey, which is the first step in determining whether the Foundation is to participate in building a clinic building, is a thorough economic study of the community and surrounding area. Over 500 communities in the U. S. have been surveyed since the S-R Foundation began—only 20% of these qualified and went on to build clinics. The experience of doctors established in S-R Centers indicates that the survey is surprisingly accurate. Young doc-

tors considering a location at a S-R medical center are well advised on its economic potential even before the building is built.

The 1962 Drug Amendments Act is effecting the change of some pharmaceutical items from "over the counter" to "prescription only." Physicians will be receiving calls from pharmacists in regard to such items. Detail men will furnish information but, since the changes may be effective as early as the 19th of August, there will be some requests for the prescriptions before detail men can see all M.D.'s.

Hospitalized children are often able to continue their schoolwork with the double advantage of a cure for hospital boredom and no loss of learning time while in the hospital. Flower and Fifth Avenue Hospitals in New York City, part of the teaching structure of New York Medical College, has a teacher of 15 years experience, Mrs. Vera Leibo who conducts school for all children who are scheduled for two weeks or longer in the hospital. In spite of teaching all grades in a one-room-schoolhouse setup, Mrs. Leibo returns the children to their regular schools in step or ahead of their school mates.

A total of 1,762,957 persons are employed in the nation's hospitals. This is 66,825 more than last year and makes hospital work one of the largest areas of employment. The ratio in short term general hospitals of patients to employees is 100 to 237. Naturally, the average patient, in paying his hospital bill, must contribute enough money to pay a living wage to 2.37 people. Hospital pay scales have always been below the general pay average, but recently hospital wages have risen somewhat. Now they do not approximate the general average but come closer to this level than ever before. This plus the fact that hospitals provide more to the patient per day accounts for the recent rise in hospital costs. The average cost per patient per day in short term general hospitals has doubled in the last ten years. ◄

About Our Cover



Trick or treat . . . lighted pumpkins on the porches, doorbells ringing, suddenly appearing small hobgoblins and witches, gypsies and pirates, all of them armed with capacious sacks to contain the tributes of candy and apples that you have ready to hand out . . . the ritual of Hallowe'en, and its resultant outbreak of "upset tummies," is here again.

Pay your tithes to your noctural visitors—or woe betide you.

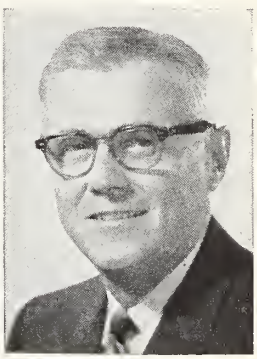
The tradition of trick or treat could also be used as a parable for adults: You must treat your heritage of freedom generously, support I-HOPE and AMPAC; treat yourselves to your inalienable right to play an active, positive part in politics, or politics and government will trick you cruelly. The tricks will not be a simple retribution such as soaped windows or even, as in passed years, an overturned outhouse—it will be an insoluble coating of paternalistic government, which once applied will be irremovable —it will be an overthrown free enterprise system.

That old litany "From Ghoulies and Ghosties and Long-legged Beasties, and Things that go Bump in the Night—*Good Lord Deliver Us!*" could well be paraphrased as "From Paternalism and Pessimism and Big Brother Government, and Things that Take Freedom Away—*We Must Deliver Ourselves!*"

The picture on our cover was taken by Philip T. Holland, M.D. of Bloomington, and *The Journal* is very grateful to Dr. Holland for permitting us to use it.—M.E.R.

President's Page

In reviewing annual reports there was noted in the Executive Committee report the statement that our association has grown in membership in the past 20 years from 3,093 in 1943 to 4,345 at the close of 1962. This is a 42% growth during this period of time. Fourteen percent of the growth has occurred in the past 10 years. In spite of the growth, we have not appreciably increased our staff, which is small in comparison with our fellow state associations of similar size. Also noted in the annual reports was the statement of our executive secretary: "About 90% of the secretary's work is detail and routine. His foremost thought is how best to serve the wants of the members and to protect and serve their interests."



At the recent AMA Institute it was pointed out that one person in 83 is engaged in furnishing full time health services as an occupation. The biggest challenge facing organized medicine today is growth. We must anticipate this growth and have more long range planning. The AMA estimates that at least 500 more medical society executives will be needed in the next 10 years and recruitment of well trained and dedicated individuals to fill these places will pose a considerable problem. Some of the qualities which are desirable in these individuals were listed as the ability to initiate, innovate and create. They should be able to organize but not over-manage. They should be able to delegate, should not manipulate, and should enlist maximum participation of the membership. They should avoid stagnation and promote new enlarged programs.

In view of the foregoing comment, our society has taken a step in the right direction in hiring a new assistant who will assume his duties October 1. He is an old friend and former staff member as a field secretary: Kenneth W. Bush. A graduate of Butler University, he has been a newspaperman, has worked for the Tuberculosis Association, was field secretary of ISMA for four years, was employed by the Indiana Heart Association for six years, the last year serving as its Executive Director. We are confident of his motivation and dedication. We feel that he is capable of growing with a growing and vigorous organization. Most important of all, he should be able to take over a considerable burden of the routine tasks from our very capable executive secretary so that more energies can be channeled into future development of our societies' activities and programs.

This concludes my tenure in office and I would like to take this opportunity to thank the many members of the Indiana State Medical Association who have been so kind to serve so generously. I regret only that it has not been possible to find ways to use the talents of even more of our members. I would also like to express my appreciation to my fellow officers for their loyal efforts and cooperation, which have been superb. I acknowledge with deepest gratitude the efforts of the Woman's Auxiliary which have been given so willingly, effectively, and enthusiastically. The entire staff have continued their very effective and dedicated assistance, have relieved much of the burden of the office and have helped to make it a pleasure to serve you during the past year.

Maurice E. Stocke

The Woman's Auxiliary

REPORTS TO ISMA

Our program book is now in the hands of all county presidents and presidents-elect to serve as the auxiliary workbook for quick reference on information about our varied programs. I would like to share with you an article written by Mrs. Max S. Norris, our liaison to the Woman's Auxiliary to the Student American Medical Association-Indiana Chapter.

"The Indiana Chapter of the Woman's Auxiliary to the Student American Medical Association has completed its second year, and continues to show progress in activities as well as membership.

"Their programs have been quite varied, educational, and enjoyable to the members in addition to benefiting others outside the organization. One meeting this year was a bazaar of their handiwork, and others included discussions on the relation of medicine to religion by a minister, on malpractice by an insurance representative, and on politics.



"In March a group of members began a course in political action, thanks to a $100 contribution for supplies from I-HOPE.

"One of their worthwhile and practical projects is to locate available housing for new students, interns, and residents coming to I.U. from out of town. WASAMA sends them welcome letters, enclosing a city map showing the location of the medical school and information of interest, as well as aiding them upon their arrival.

"This is a hard working, ambitious group of medical students' wives. The organization at present lacks experience, time and money. They are gaining experience and doing well. They are learning about budgets, and long range, organizational planning. They all have jobs and/or children; their time is limited. Again please remember, these will be the new members of our auxiliaries all over the country. It is our duty to become acquainted with their problems and ideas. We should support them at every possible opportunity and advise when needed.

"It has been a delightful, stimulating, and rewarding experience to work with such intelligent, enthusiastic girls and should give us faith in the future of our medical auxiliaries."

This page taken from the Program Book is a fine example of what our chairmen are doing. Their efforts and work today will be felt in the auxiliary in future years.

Zelda K. Sullivan



For dramatic restoration

WINSTROL®

brand of STANOZOLOL

Oral anabolic therapy with this new physiotonic helps restore the patient's: positive protein metabolism; confidence, alertness and sense of well-being.

WINSTROL (stanozolol/Winthrop), a heterocyclic steroid, combines highest potency* with outstanding tolerance, stimulates appetite and promotes weight gain... restores a positive metabolic balance. It counteracts the catabolic effects of concomitant corticosteroid or ACTH therapy. WINSTROL (stanozolol/Winthrop) rebuilds body tissue while it builds strength, confidence and a sense of well-being in conditions associated with excess protein breakdown, insufficient protein intake and inadequate nitrogen and mineral retention.

Side Effects and Precautions: Prolonged administration can produce mild hirsutism, acne or voice change. In an occasional patient, edema has been observed and in young women the menstrual periods have been milder and shorter. These side effects are reversible, and patients receiving prolonged treatment should be examined and questioned periodically so that, should side effects appear, the dosage may be reduced or administration of the drug discontinued for a time.

In patients with impaired cardiac and renal function, there is the possibility of sodium and water retention. Liver function tests may reveal an increase in bromsulphalein retention, particularly in elderly patients. In such cases, therapy should be discontinued. Although it has been used in patients with cancer of the prostate, its mild androgenic activity is considered by some investigators to be a contraindication.

Dosage: Usual adult dose, 1 tablet t.i.d. before or with meals; young women, 1 tablet b.i.d.; children (school age): up to 1 tablet t.i.d.; children (preschool age): ½ tablet b.i.d. Available as scored tablets of 2 mg. in bottles of 100. For best results, administer with a high protein diet.

*ANIMAL DATA

Rx WINSTROL (stanozolol/Winthrop) whenever anabolic therapy is indicated

Winthrop

Winthrop Laboratories, New York 18, New York

TAX TIPS

Final Limitations on Business Travel and Entertainment Listed

COMMISSIONER of Internal Revenue Mortimer M. Caplin has announced publication of final regulations on business travel and business entertainment expenses, dealing with the limitations on deducting these expenses for Federal income tax purposes.

The final regulations are the result of changes made in earlier proposed regulations after the proposed regulations were subjected to criticism and recommendations at public hearings in May.

Mr. Caplin said the final regulations will curb the income tax abuses under the old law and, at the same time, will not impose undue restrictions on deducting reasonable and legitimate business expenses.

The major changes incorporated into the final regulations are:

1. The proposed regulations generally required a taxpayer to show he had an expectation of deriving income or other business benefit immediately or at a definite or readily determinable future time. This requirement was modified to recognize less immediate business expectations.

2. Under the proposed regulations, that part of social, athletic, or sporting club dues allocable to quiet business meals was treated as "directly related" entertainment expense only if the club was used primarily for business meals. In the final regulations, the "primarily for business meals" requirement has been deleted. Under this change, if a club is used 20% for business meals and 40% for directly related entertainment, the taxpayer will be able to deduct 60% of his club dues. This rule also has been extended to depreciation and general operating expenses of all entertainment facilities to the extent allocable to business meals.

3. It has been made clear that an expense for business goodwill entertaining, when occurring simultaneously with a "substantial and bona fide business discussion," and which is allocable to a person not participating in the business discussion, is not disallowed under the new rules if such person is closely connected with a participant, such as a spouse.

4. The term "business associate" has been clarified to expressly include a taxpayer's customer, client, employee, agent, partner, or professional adviser, whether established or prospective.

5. The regulations provide that expenses for tickets to entertainment events may be treated either as a gift or as entertainment, whichever is most advantageous to the taxpayer. The final regulations have been clarified to state specifically that a taxpayer may change his treatment at any time during the period provided for assessment of tax for the year in which the expense was made.

6. The regulations provide that, for entertainment to be considered directly related to the active conduct of business, the conduct of business must generally constitute the principal character or aspect of the combined business and entertainment activity. It has been made clear that, to satisfy this test, it is not necessary that more "time" be devoted to business than to entertainment. Similar clarification has been made in the provisions dealing with entertainment associated with substantial and bona fide business discussions.

7. The regulations have been modified to indicate more clearly that, under certain circumstances, entertainment may be considered to "directly precede or follow" a substantial business discussion even though it does not occur on the same day as the business discussion.

8. The regulations provide that the business meal exception applies typically to food or beverages served at places such as restaurants or hotel dining rooms. The final regulations recognize that there may be circumstances when the business meal exception will also apply to expenses for meals or beverages served in a taxpayer's residence provided there is a clear showing that the expense was commercially rather than socially motivated.

9. The regulations, relating to allocation of certain travel expenses on combined business-vacation trips, provide that no disallowance will be made under the new rules if a traveler does not have a substantial control over the arranging of his business trip. An employee traveling for his employer is not deemed to have substantial control unless he is related to his employer or a "managing executive." In the final regulations, the term "managing executive" is restricted to an employee who, by reason of his authority and responsibility, is authorized, without effective veto procedures, to decide upon the necessity for a business trip. ◄

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Gleaned from the British Medical Journal

JACK W. HICKMAN, M.D.
Indianapolis

A rather unusual complication of nutritional cirrhosis is presented by Pant et al.[1] in which they describe the development of a bizarre type of myelopathy. Two such patients are described in their report and in both cases the patients developed chronic spastic paraplegia during the course of their cirrhosis. Rather thorough studies were done to investigate the possibility of other concomitant diseases that might have been responsible for the neurological deficit. However, in neither case were they able to document such a condition. The authors note that two similar cases have been described by Zieve et al. in 1960. Another interesting facet of this report is that three of the four cases now reported have had portacaval shunt procedures done. Both patients showed a remarked degree of intolerance to protein ingestion in their diet; and this, of course, has previously been noted in patients with cirrhosis who have undergone shunt procedures. The myelopathy was characterized by an insidious and steady progression within a few months. The exact mechanics of the production of this disability is surely speculative at this time and must await the report of further cases.

* * *

A fine review article on infectious mononucleosis is presented by Dunnet.[2] In his report, the author presents further nicely documented studies that tend to confirm the statement that some degree of hepatitis occurs in every case of infectious mononucleosis, and that this should be regarded as part of the syndrome rather than a complication of the disease. Serum isocitric dehydrogenase activity appeared to be the most reliable indicator of hepatic involvement and was elevated in 93% of the cases. The author has no further suggestions as to therapy except to state again that antibiotics were of no value, but that at times steroids seemed to be of some benefit. Myocarditis was found in 16% of the cases and a skin rash in 41% of the cases. Both percentages appeared to be somewhat higher than were reported in the past.

* * *

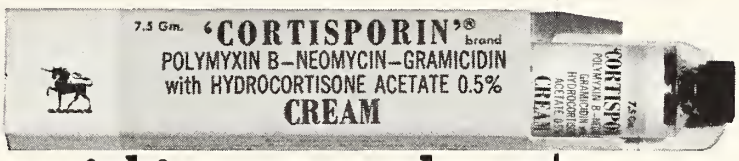
In addition to the safeguard of having slit-lamp examinations performed at monthly intervals on patients taking chloroquine, it may now be that we will want to perform routine psychiatric evaluations on the patients at frequent intervals if the report by Rab[3] is confirmed. In this brief report, the author presents two cases of chloroquine psychosis. Both patients in this report were receiving the chloroquine for amebic hepatitis; therefore, the dosage schedule was 250 mg. q.i.d. which was certainly higher than the dosage of this drug used in the conditions of discoid lupus erythematosis, rheumatoid arthritis, Weber-Christian syndrome, etc. Therefore, it seems unlikely that such drug-related psychoses will be noted with any frequency in this country. Even earlier reports such as this, however, should be noted seriously, and such major side reactions should alert physicians who may use this medication.

* * *

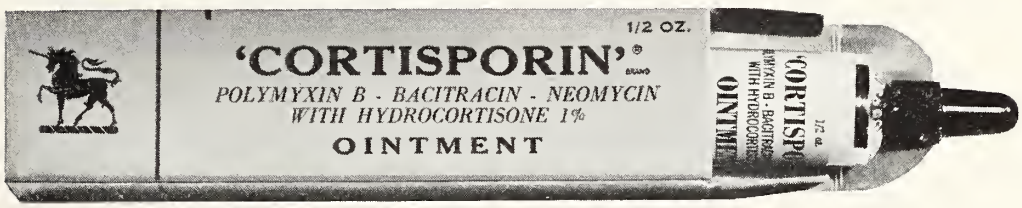
Methyldopa which has recently been introduced as an anti-hypertensive drug (as Aldomet) comes in for some criticism in its apparent production of lactation. The report by Pettinger et al.[4] curiously enough comes from the National Heart Institute and draws attention to the production of lactation in five out of 15 hypertensive women undergoing prolonged treatment with methyldopa. A rather clear-cut rela-

Continued

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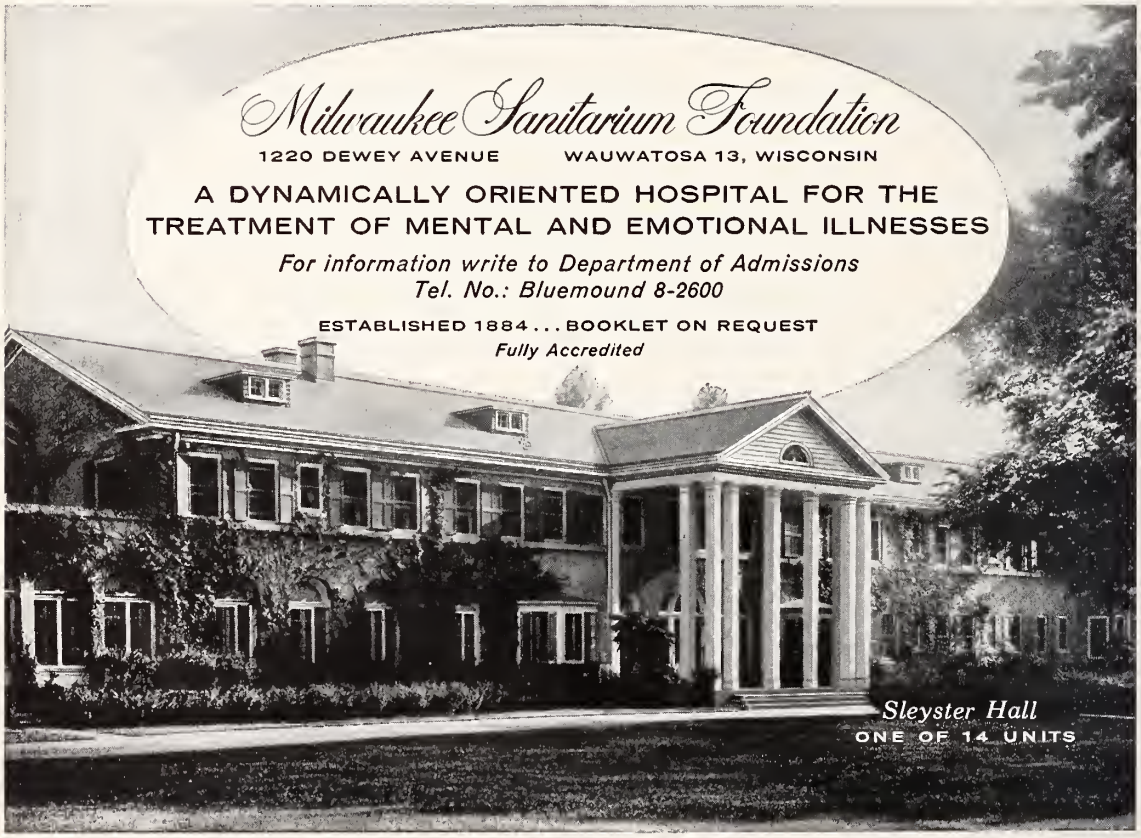
GLEANED

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tionship of the medication to the phenomenon was noted. Although this same phenomenon has been noted in women treated with reserpine and phenothiazine derivitives in the past, the authors do not speculate as to its mechanism of production. The shortest time interval in which this side effect developed was after seven months of treatment with the drug. It will be interesting to watch for future reports of this condition.

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Medical Panorama

The Ounce of "Prevention"

A. W. CAVINS, M.D.
Terre Haute

There is much lamentation over alcoholism, but little is known to the public about its prevention, or more accurately, its being "nipped in the bud." The word prevention in the title is in quotation marks to indicate "prevention" of early alcoholism from becoming chronic.

This possibility is well and succinctly outlined in a report by the Committee on Occupational Health of the California Medical Association (*California Medicine*, Vol. 99, No. 2, August, 1963) and is reprinted here together with its footnotes because of its soundness and objectivity.

There is no sentimentality here. At present the best salvage to be hoped for is 50% but this is better than we expect in many diseases, and continuing efforts may improve this rate. The report below was prepared with industrial workers in mind, but the principles outlined could be applied to other occupations as well. Our compliments to the California committee.

A Fifty-Fifty Chance

"Because we have no definite diagnostic test for early alcoholism, many victims become long-time addicts before seeking help. Even so, with employer cooperation, modern methods of treatment can return perhaps half of such persons to habitual sobriety; although it cannot, of course, reverse all physiological changes that may be associated with prolonged alcohol consumption.

A physician's effort to give this fifty-fifty chance to those who need it must be twofold. First, he must learn the known characteristics of alcohol poisoning, of alcoholics and of available treatment so that he may counsel the employer, the employee and the employee's family. Such information is readily available.*

Next, the physician must persuade the employer to cooperate in the early discovery of alcoholism and then to provide a "crisis" which may help an afflicted employee to understand that life without alcohol may, after all, be preferable to life with it.

In industry, the immediate supervisor holds the key to early diagnosis, since it is he who may first notice the drop in work quantity and quality, the pattern of absenteeism and excuses, the alcoholic breath, and, often, the personality change following a lunch hour used for refortification with alcohol.

The moment a supervisor suspects alcoholism, he should confer with the company physician. He may be reluctant to do this unless he is made to understand that such a conference will help his employee more than if he covers for him. A clear-cut com-

* Among good sources of information:
- A film—excellent for management groups—is one titled "For Those Who Drink" by R. G. Bell. Available for purchase or rent through L. L. Cromien & Co., 229 Yange Street, Toronto, Ontario, Canada.
- For general information:
 "New Primer on Alcoholism" by Marty Mann (Holt, Rinehart, and Winston). Price $2.95.
 "Alcoholism in Industry," a pamphlet by the Christopher D. Smithers Foundation, Inc., New York.
- For names of specialists, clinics, and Information Centers on Alcoholism in your area, write the National Council on Alcoholism, 2 East 103rd Street, New York, N. Y. 10029.

Continued

pany policy on alcoholism can give the supervisor reassurance in this matter.

Company policy should include: (1) A clear and publicized statement recognizing alcoholism as a health problem which requires treatment; (2) An offer of assistance in getting the patient under proper treatment; and (3) A firm statement that the employee will be discharged from his job if no progress has been made after a reasonable time.

While the threat of job loss is critical to the success of the program because it provides the pressure needed to persuade the employee to seek help, both company policy and physician should stress the offer of assistance and the fact that help *is* available.

Since over three percent of industrial workers are believed to suffer from alcohol addiction, efforts along these lines can be highly rewarding to a physician as well as to the industry."

Committee on Occupational Health
California Medical Association ◄

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Speech given before the Joint Cost Committee of the Indiana State Medical Association, July 24, 1963, at Indianapolis.

Economics of Voluntary Health Agencies

JOHN S. PEARSON, M.D.*
Indianapolis

THIS TITLE, assigned to me by Dr. E. T. Edwards, leaves me freedom to explore all facets of health insurance as we know it today. I will, however, limit the scope of my talk to those practical areas of current interest with which most physicians have a vital economic interest.

I should like to point out, by way of introduction, that I am medical director of a national insurance company which actively sells considerable amounts of various forms of health insurance. Professionally, I am very interested in all economic aspects of this protection.

Although I am a member of this committee as a representative of the Health Insurance Council, I do not today presume to speak for the industry. My comments, however, are those generally accepted by the industry.

What is insurance? How is it defined? The Commission on Insurance Terminology agreed in 1962, that insurance could be called "a pooling of risks by transfers to insurers, who agree to indemnify the insured for such losses, provide other pecuniary benefits on their occurrence, or render services connected with them." More easily stated, the purpose of insurance is to substitute certainty for uncertainty. By giving up small certain losses (the annual premium) the insured protects himself against the uncertainty of possible large, ruinous losses. This, in brief, is the philosophy of insurance.

Group vs. Individual Coverage

Insurance, in general, has the basic purpose of alleviating economic loss, so health insurance, in particular, intends to protect against the *major* costs of poor health. To achieve this end, various types of health insurance have been designed by a variety of organizations and for a multiplicity of purposes. Today we have disability insurance, hospital insurance, surgical insurance, major medical insurance, medical expense insurance and even polio and dread diseases insurance. Policies have been designed by and for professional groups, fraternal groups, industries, funds, unions, government employees, and the general public. The purpose and/or design of the health insurance, in a secondary sense, sometimes varies with the ultimate receiver of the benefits. (This may not necessarily be the insured). The ultimate advantage of health insurance may therefore rest with the final recipient of the claim monies, which brings us to the two broad categories of health insurance, group coverage and individual coverage, and to several divergent philosophies on the economics involved.

What is poor health? "Poor health" may be defined as "any physical or mental impairment which requires treatment in the opinion of accepted medical practice, or results in observable loss of working time." Further, poor health is produced by either injury or disease—*injury* being a sudden and usually violent physical impairment produced by accident or the deliberate act of either the insured person or others. An *accident* is an event occurring without intent and, consequently, is unpredictable as far as the individual is concerned. *Disease* is a sickness, infection, abnormal growth, mental state, or other loss of function

* Medical Director of American United Life Insurance Company.

which is not the result of injury. Both accident and disease may result in *disability* which is the term used to refer to inability to work. This may, then, result in economic loss. As the economic loss is of two types—loss of earning power and cost of medical care—disability is better defined as loss of earning power *or* wealth as a result of poor health.

In the individual case the occurrence of disability is unpredictable, but in the aggregate, under normal conditions, the probability of such loss can be predicted; consequently, insurance can be devised to reduce the risk to the individual, of financial loss resulting therefrom. As there are two types of economic loss, there are two basic types of insurance coverage—one to protect against the loss of earning power and one to protect against the cost of medical care. Both of these coverages must be designed to satisfy a basic tenet of insurance, in that the event insured against is financially undesirable as far as the individual is concerned.

Medical Care Cost

As the prior discussions of this group have concerned the cost of medical care exclusively, I will first speak on this subject.

I doubt if it is pertinent to spend any time on historical aspects, except possibly to point out the divergence of philosophy and regulation between the Blue Cross operation on one hand and insurance companies on the other. Blue Cross hospitalization plans were originally conceived by individual hospitals to alleviate their precarious financial position during the great depression. Blue Cross, for example, regards itself primarily as a representative for the hospital, and only secondarily as representatives of the public. This marketing philosophy among other things has led the Blue Cross to concentrate on what is called "first dollar" approach, that is, the paying of all hospital bills no matter how small, which come within a modest ceiling.

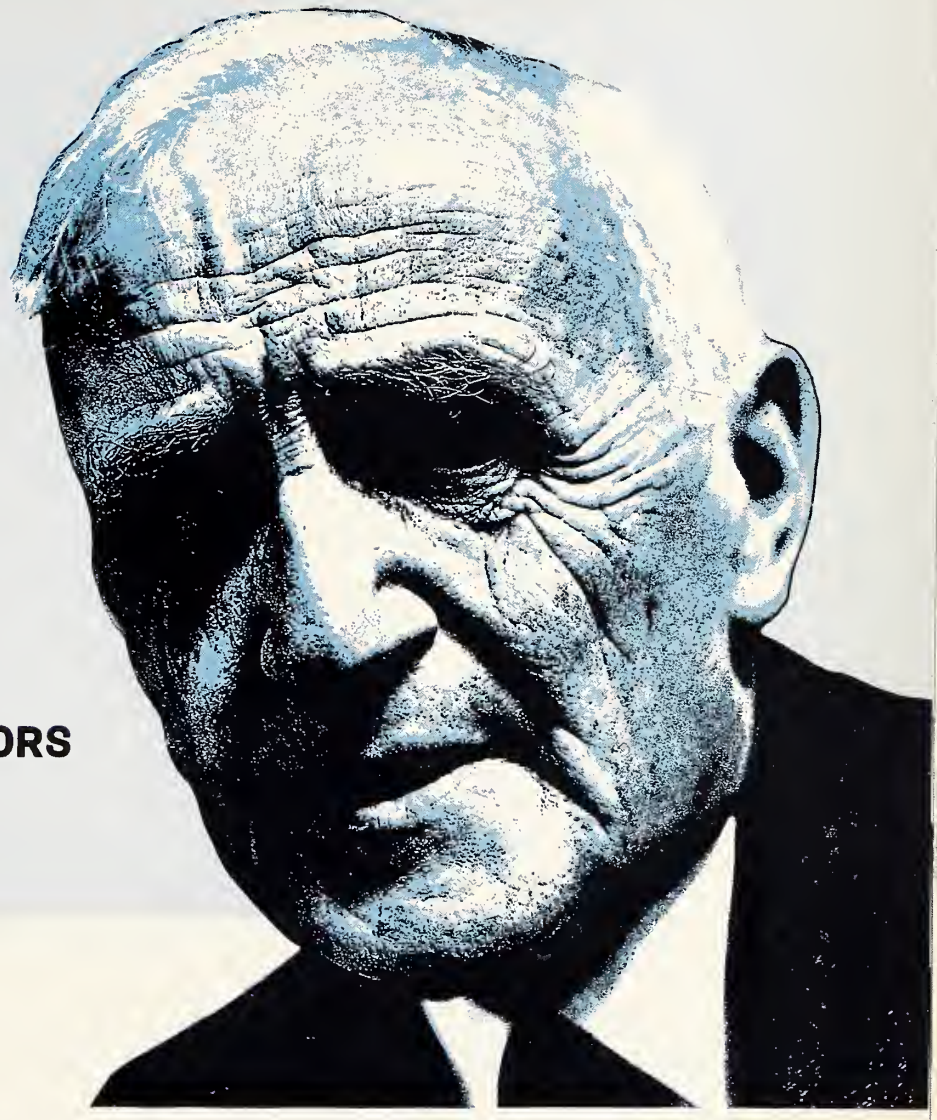
Traditionally, the Blue Cross contracts have been with groups rather than with individuals and have used a community-rating approach in setting premium rates. This means charging each group in the community the same rate, regardless of cost. The high cost group account is averaged in with the low cost group account; each paying one flat premium or subscription rate at a level somewhere between the high and the low. Prior to 1935, state insurance commissioners had consistently ruled that hospital service plans were not engaged in the insurance business but rather in the sale of a service and therefore were exempt from the laws and regulations pertaining to insurance companies.

However, in that year (1935), the New York State Superintendent of Insurance ruled that such plans did constitute the conduct of the business of insurance and were subject to all of the rules and regulations applicable thereto. Pressure was then brought to bear on the New York State Legislature to pass an act exempting any corporation organized for the purpose of operating a non-profit hospital plan from most of the customary insurance regulations. This was passed and most other states soon followed suit. Today, in the vast majority of jurisdictions, such plans are exempt from certain forms of taxation, including the payment of taxes on premiums collected to which insurance companies are subject. The American Hospital Association has been whole-heartedly backing Blue Cross operations, and in general most individual doctors have been the non-commissioned sales agents.

Insurance companies on the other hand, following their traditional approach, began the sale of hospitalization contracts on an individual basis and moved from there into the group sales efforts, but maintaining certain underwriting practices and using the experience-rating approach. This means charging each group according to its specific cost in terms of benefits paid and expenses incurred by the insurance company, as nearly as can be determined, after allowing for chance fluctuations in the rate of outgo. This philosophy of experience rating stems from the bill-paying approach rather than the bill-collecting approach. As all insurance companies are in business for "profit" —even though that "profit" is returned to its policyholders to a large extent through

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1. Ford, R. A., and Blanchard, K. P.: J.-Lancet 78:185, 1958.

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return of premiums in the form of so-called "dividends"—they are subject to all of the laws regulating insurance including the licensing of agents, premium taxation, etc.

First-Dollar Coverage

There are several types of hospitalization and medical care coverages available. First—traditionally Blue Cross and some other carriers, using a cancellable type contract, have issued policies providing for first-dollar coverage. This very probably has been one of the causes for over-utilization, in that it encourages the patient to request hospitalization for many procedures, both diagnostic and therapeutic, which could be accomplished on an out-patient basis or in the doctor's office. Second—insurance companies generally have used the deductible approach, that is, the patient is made responsible for the small and manageable medical expenses, paying the first $25, $50, or so dollars. A much lower premium needs to be charged for such contracts, as the insurer does not have to process the many small claims, and the deductible itself imposes some deterrent to the patient in terms of the unnecessary hospitalization.

Both of these so-called basic types have inside limits as to what expenses will be paid—so many days hospitalization, so much for room and board per day, surgical fee schedules, etc. Many doctors have complained about the fee schedules which are incorporated in such policies, stating that thereby the carrier is setting their fee. This is, of course, not the intent. Although companies would prefer to issue contracts with so-called "adequate" fees for services rendered, the policy provisions must be set for the price paid by the insured. Most of the hospitalization coverage in force today is on a group basis, and almost always in any employer-employee group, the price to be paid is a subject of union-management negotiation. This, of course, brings up another economic problem—over-insurance or multiple coverage.

As the group plan negotiated by union and management may be inadequate, individuals are motivated to seek additional coverage and may become over-insured, in that at time of claim they make money on their various coverages. Another motivation for over-insurance is the attempt by individuals to replace lost earnings, as well as medical cost, through hospitalization contracts. Obviously, this latter, the replacement of lost income, is the subject for an entirely different type of insurance which we will discuss later.

A third type of health insurance coverage is the so-called major medical or catastrophic medical cost policy. Traditionally this type coverage has a high deductible—$500, $750, $1,000—with a maximum liability of $5,000, $10,000, or $15,000. In this type of coverage, another protective device is used by the insurer—this is the coinsurance feature. After the deductible, insurer pays 75 to 80% of the charges and the individual pays the rest. The justification for both the deductible and the coinsurance feature is that by getting the insured into the act, he is motivated thereby to hold down utilization. Originally these major medical contracts were written without any inside limits or schedules—the insurer relying on the provision that they would pay the "usual or customary" fees. Unsatisfactory results occasioned by over-charging by the minority of doctors and the unenforcible decisions of certain review committees, have caused many companies to include in their policy a fee schedule. Today, many of the fee schedules are on the basis of, and in terms of, a "relative value schedule."

The Comprehensive Policy

Many group contracts are written today which incorporate both the basic and the major medical provisions under what is called a "comprehensive policy." This type of contract has a relatively low deductible, that is $25 to $50, built-in limits, a fee schedule, etc., but does cover the insured up to the high maximums. When both coverages are written as separate contracts, the deductible for the major medical is set at "X" dollars above the limits available through the basic policy, that is with a "corridor" provision, but continuing protection to the insured when the basic benefits are exhausted.

As has been mentioned several times in

our meetings—no insurance available today is so abused as is health insurance. Those of you who were here at our last meeting will recall how succinctly Dr. Annis (now President of the American Medical Association) put it. As he said, people do not expect their automobile insurance coverage to pay for oil changes, new tires, or the motor tune up—but they do expect to collect from their medical care coverage no matter how minor the problem.

By the same token, all providers of health care must recognize a basic truth, that is, the presence of insurance does not create money. All that voluntary prepayment health insurance can do is increase the ability of the covered insured to pay his bills. The totally unjustified and obviously abusive charge of $1,000 for an appendectomy is a conspicuous over-charge and naturally the object of well deserved criticism. Such instances are relatively rare and, financially, are no where near as important as a lot of small over-charges made because of the existence of insurance. A $5 overcharge on every case can add up to an awful lot more than an occasional $500 overcharge.

Disability Income

No treatise on the "economics of voluntary health insurance" could approach completion without at least a few words on the subject of disability income or loss-of-time coverage which is that type of insurance made available by insurance companies to protect against the loss of earning power. The hazard of disability is universal. Disability can be absolute or relative, and it can vary with age, occupation, financial status, location, physical structure or temperament. Economically, the productive value of a human life is comparable to that of a valuable machine. Life and the earning ability of the breadwinner is the biggest asset, often the only substantial asset, of the average family. Yet it is estimated that only about one-seventh of the amount of insurance necessary to protect the American workers' income on an adequate basis is as yet in force.

This type of coverage has as its function the continuation of part of the income of the insured during the time when, by reason of injury or disease, he is unable to work. As you well know, other devices are available to cover such losses when they are occasioned by either unemployment or retirement. The magnitude of the hazard is staggering. A recent survey indicates that 3% of the working population is affected with long-term (over two weeks), illness each year, that accidents cause over 300,000 permanent impairments, and almost 10 million temporary total disabilities each year.

Every 10 minutes of every hour of every day in the year, almost 200 persons are injured. The United States Public Health Service estimates that during the course of one year 85% of the total population complain of "something," 68% consult a doctor, 52% are absent one or more days from work or school, and 44% are confined to bed because of disability. In a recent year, motor vehicles accounted for 40% of the total accidental deaths which occurred, but for every death there were approximately 100 non-fatal but totally disabling injuries. In the total population, disabilities of one week or longer occur at the rate of almost 200 per 1,000 annually (that is two in 10). The average duration of these disabilities is 26 days for the acute cases and 138 days for the chronic ones.

Influence of Economic Stress

The incidence of disability is vitally affected by the economic cycle. Inadequate income with reduced standard of living and subsequent neglect of preventative medical care, substandard food intake, etc., results in poor health conditions. Additionally, during periods of economic stress malingering increases. It is a fact that it is neither desirable nor practical for an insurer to attempt to absorb, on behalf of the insured, the entire impact of lost wages. Any such benefit, the enjoyment of which is consistent with the desires of the insured, is foredoomed to failure.

I think it is perfectly obvious to each of us that any individual who can collect more while disabled than he can earn through constructive employment, is not likely to return to work. An individual should never obtain loss-of-time coverage for as much net income as he can receive while working.

Continued on page 1350

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dependable: 'Miltown' (meprobamate) is an established drug. There are no surprises in store for you or your patient. You can depend on it to help your patients through periods of emotional distress — and to help maintain their emotional stability.

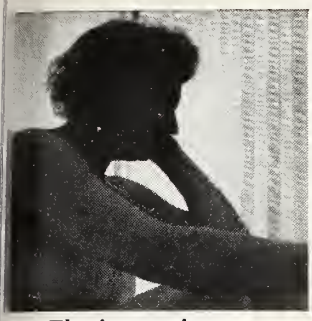
easy to use: Because 'Miltown' (meprobamate) is compatible with almost any other kind of drug therapy, you'll find it fits in easily with any program of treatment you are now using. It will not, therefore, complicate treatment of patients seen in clinical practice.

BRIEF SUMMARY: *Indications:* Anxiety and tension states, and all conditions in which anxiety and tension are symptoms. *Side Effects:* Slight drowsiness may occur and, rarely, allergic or idiosyncratic reactions, generally developing after 1-4 doses of the drug. *Contraindications:* Previous allergic or idiosyncratic reactions to meprobamate contraindicate subsequent use. *Precautions:* Should administration of meprobamate cause drowsiness or visual disturbances, the dose should be reduced. Operation of motor vehicles or machinery or other activity requiring alertness should be avoided if these symptoms are present. Effects of excessive alcohol may possibly be increased by meprobamate. Prescribe cautiously and in small quantities, to patients with suicidal tendencies. Massive overdosage may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after prolonged use at high dosage. *Complete product information available to physicians on request.*

USUAL ADULT DOSAGE: 1 or 2 400 mg. tablets t.i.d.

SUPPLIED: 400 mg. scored tablets, 200 mg. coated tablets.

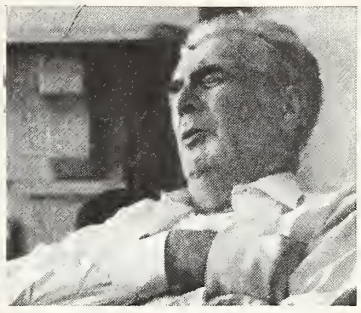
CM-9698



The insomniac



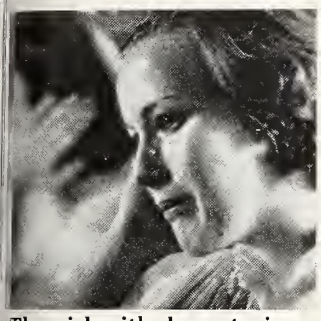
The tense, nervous patient



The heart-disease patient



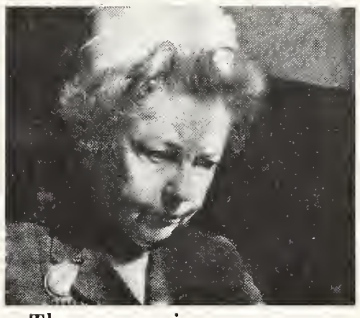
The surgical patient



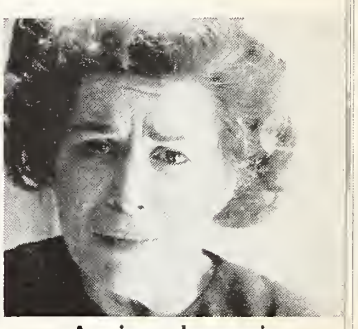
The girl with dermatosis



Tension headache



The woman in menopause



Anxious depression



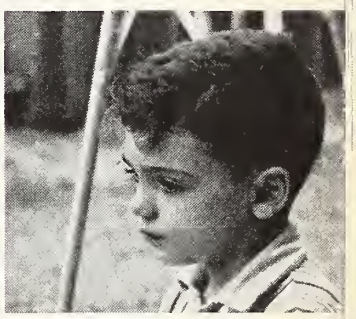
Premenstrual tension



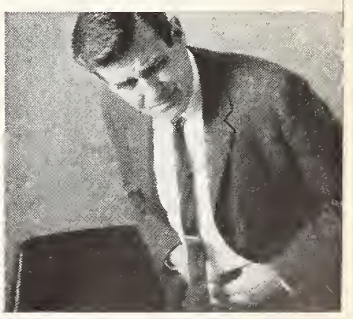
The agitated senile patient



The alcoholic



The problem child



The G.I. patient

the original brand of meprobamate

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The net income must be the basis to consider rather than the gross income since any benefits received through insurance are tax free. Additionally, all other types of coverage must be considered when arriving at a total amount to be insured. Among these other types are state compulsory disability statutes, Workmen's Compensation Act, federal benefits under National Service Life Insurance, Veterans Administration disability benefits, Social Security disability benefits, and finally any disability benefits received through the medium of riders to life insurance coverage.

As with health insurance, much of this type coverage is in force on a group basis and frequently is a subject for union-management negotiations. The standard group contract provides benefits of relatively short-term periods—13, 26 or 52 weeks. Longer benefit periods—two to five years commonly—are usual in such franchise groups as offered to various professional organizations such as medical societies. The true non-cancellable, guaranteed renewable long-term contracts are almost exclusively issued on an individual basis.

As was brought out in the discussion of over-insurance under the hospitalization area, one of the causes of over-insurance is the individual's motivation to replace lost income during periods of hospitalization. Obviously, the type of coverage under consideration now—loss-of-time coverage—is the answer to this need.

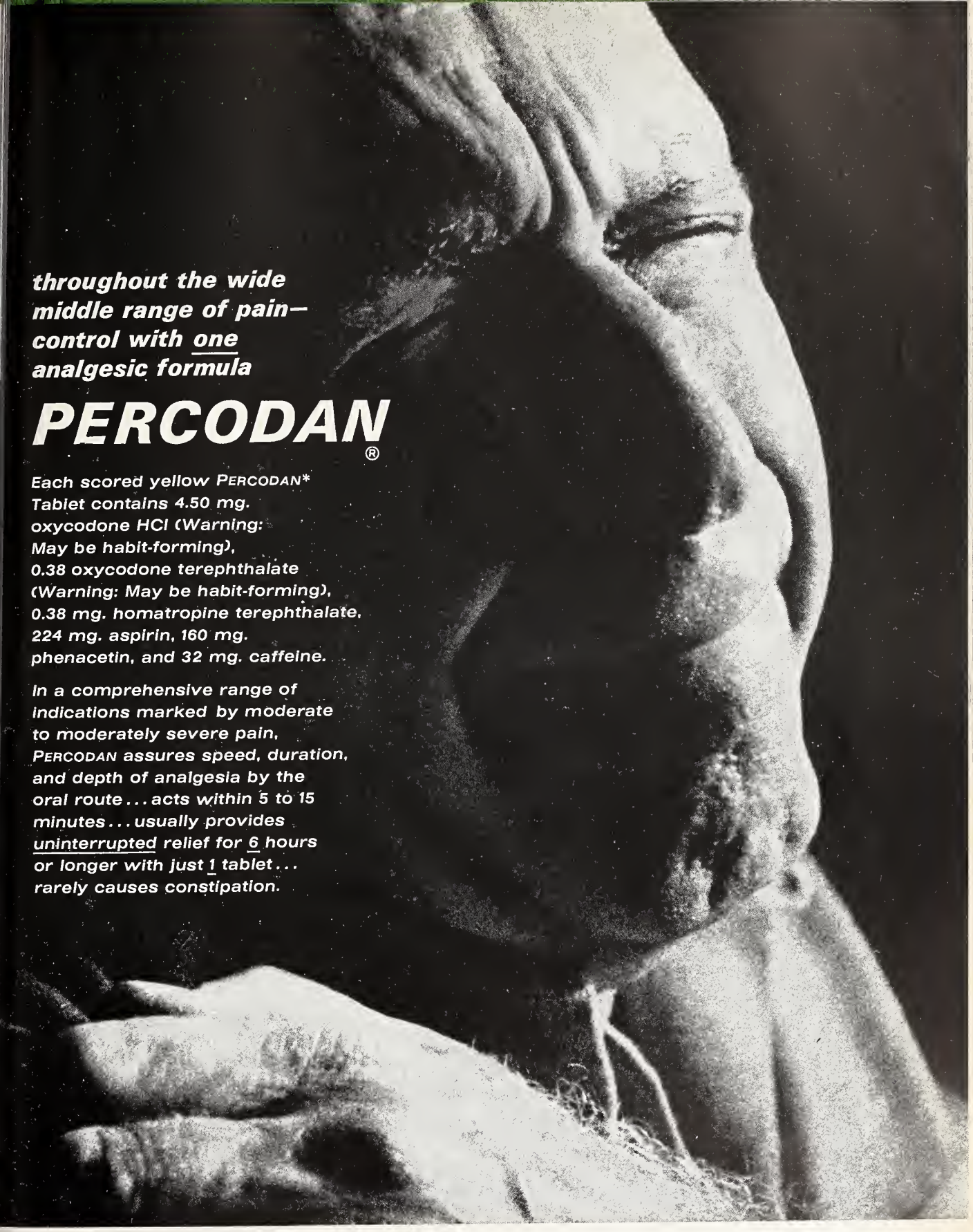
Dollar Sign Statistics

Finally, we might very briefly review some of the dollar sign statistics involved in the whole picture of health insurance economics. It is currently estimated that the nation's employers are paying about 10 billion dollars annually, or an average of about 6% of their annual payrolls to provide employees with pension plans and life and health coverages. More than one-half of the American wage and salary workers are insured by life insurance companies for these benefits. During 1962 insurance company policyholders received nearly 3.8 billion dollars in health insurance benefits alone. Of this amount over 1½ billions of dollars went to pay hospital expenses, over 1.2 billion went to cover doctors charges, and almost a billion dollars was paid to individuals for loss of income during disability.

The figures showing the number of covered individuals at the end of 1962 are not yet completely available but as of the beginning of 1962, 136½ million people were protected by hospital expense plans, 127 million were protected by surgical expense plans, 94 million were protected by regular medical expense plans, 34 million were protected by major medical expense policies, and over 43 million wage earners were protected by loss of income plans. Making all of this available to the American public were 839 insurance companies, nearly 800 indepenent type health insurance programs, 77 Blue Cross plans, and 69 Blue Shield plans. Also, as of January 1, 1962, there were 170 companies actively writing health insurance in the "over 65" age groups.

I would like to close this presentation with an admonishment to all of us. With the hot breath of a socialist-minded government breathing down our necks, it behooves each of us, whether we represent the medical profession, hospitals, or the insuring mechanism, to do everything we can, both individually and collectively, to see that the voluntary method for prepayment of health care and disability be maintained and expanded. ◄

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Each scored yellow PERCODAN* *Tablet contains 4.50 mg. oxycodone HCl (Warning: May be habit-forming), 0.38 oxycodone terephthalate (Warning: May be habit-forming), 0.38 mg. homatropine terephthalate, 224 mg. aspirin, 160 mg. phenacetin, and 32 mg. caffeine.*

In a comprehensive range of indications marked by moderate to moderately severe pain, PERCODAN *assures speed, duration, and depth of analgesia by the oral route... acts within 5 to 15 minutes... usually provides uninterrupted relief for 6 hours or longer with just 1 tablet... rarely causes constipation.*

Average Adult Dose—1 tablet every 6 hours. **Precautions, Side Effects and Contraindications**—The habit-forming potentialities of Percodan are somewhat less than those of morphine and somewhat greater than those of codeine. The usual precautions should be observed as with other opiate analgesics. Although generally well tolerated, Percodan may cause nausea, emesis, or constipation in some patients. Percodan should be used with caution in patients with known idiosyncrasies to aspirin or phenacetin, and in those with blood dyscrasias. **Also available:** Percodan®-Demi, containing the complete Percodan formula but with only half the amount of salts of oxycodone and homatropine. Both products are on oral Rx in all states where laws permit. Narcotic order required. **Literature on request.** **ENDO LABORATORIES Richmond Hill 18, New York** Endo®

*U. S. Pats. 2,628,185 and 2,907,768

Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Damages Awarded for Arm Paralysis Following Abdominal Surgery—A judgment for $25,000 against a hospital for paralysis of a patient's arm following a hysterectomy was affirmed on appeal. The Supreme Court of the State of Washington held that the doctrine of res ipsa loquitur was applicable and that the evidence was sufficient to support a verdict in favor of the patient. Under that doctrine, negligence may be inferred where injury results under circumstances where it would not ordinarily occur in the absence of negligence.

Testimony of doctors and nurses showed that the paralysis was probably caused by trauma while the patient was under anesthesia. It also showed that the injury could have been caused by faulty positioning of the patient on the operating table, by rotating the patient's arm while it was extended, by movement of the patient while the table was tilted, or by traction or pressure on the arm or shoulder. It likewise showed that paralysis of an arm following such an operation is extraordinary. The appellate court held that this evidence was sufficient to permit application of the doctrine. It said:

> "Surely, to emerge from abdominal surgery with a paralyzed arm is so extraordinary an occurrence within the general observations of mankind as to raise an inference of negligence that requires both an explanation and proof of non-negligence to meet. It may well be that surgery to or manipulation of a part of the human anatomy will normally produce drastic symptoms in other parts of the body not related to the situs of such surgery or manipulation, but, if so, we may be sure that this could readily be proved."

Horner v. Northern Pacific Beneficial Association Hospitals, Inc., 382 P. 2d 518 (Wash., June 13, 1963).

Failure of Physician to Follow Directions Exonerates Drug Manufacturer from Warranty Liability—Failure of a physician to follow directions issued by a drug manufacturer for the administration of its product constituted intervening negligence which relieved the manufacturer from liability under an implied warranty. Where a drug is used in a manner contrary to adequate warnings given by the manufacturer, the warranty does not extend to the persons by whom it is so used, an intermediate appellate court in California ruled.

A patient was administered Sparine, a promazine drug. Following administration of the drug, the patient suffered agranulocytosis, a blood disorder, from which he died. The patient was given the drug for an emotional depression. Literature issued by the manufacturer noted that a small percentage of patients developed agranulocytosis from use of the drug. It warned that patients should be observed frequently and asked to report immediately any signs of infection so that the drug could be discontinued and suitable therapy initiated if the disorder developed. The physician who administered the drug failed to follow these precautions, the evidence showed. Under these circumstances, the trial court refused to give instructions on the theory of implied warranty. This ruling was upheld on appeal.

Continued

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Practically standard treatment, now, for bleeding ulcer. Why is Maalox included? Antacid therapy *must* continue long after the wound has healed, and patients started on Maalox tend to stay on Maalox. It tastes good; it's effective and will not cause constipation—three important reasons for Maalox over the long haul. Some physicians, we are told, order Maalox routinely for hospital patients on drugs which could irritate. They feel it reduces the likelihood of gastric discomfort. Supplied: Suspension; Tablets No. 1; Tablets No. 2. (Each Maalox No. 1 Tablet is equivalent to 1 teaspoonful and each Maalox No. 2 Tablet is equivalent to 2 teaspoonfuls of Suspension.)



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MEDICINE AT LAW

Continued

The appellate court held that the intervening negligence of the physician precluded application of a warranty. It ruled that warning given to physicians was adequate and that a warning to the public was not required. It also said that a drug manufacturer's implied warranty does not run to those who happen to be allergic to the drug unless the allergy is one possessed by a substantial number of the possible users. The manufacturer's duty is to reasonably guard against probabilities, not mere possibilities, the court said.

The appellate court also ruled that there was nothing improper or prejudicial in permitting the defense attorney to state that $23,500 had already been paid to the patient's survivors in settlement of claims against others originally named in the suit. Originally, the sanitarium at which the patient was treated, seven physicians and nine nurses were named as defendants, in addition to the manufacturer. The suit was dismissed with respect to these other defendants. The widow of the patient admitted that she had received the payment. The court said that this matter was properly brought to the attention of the jury, since the manufacturer was entitled credit for compensation paid by alleged joint wrongdoers.

Magee v. Wyeth Laboratories, Inc., 29 Cal. Rptr. 322 (Cal., March 22, 1963).

Baby Conceived by Artificial Insemination Illegitimate But Entitled to Support from Mother's Ex-husband—Medico-legal history was made by a New York trial court in deciding a thorny problem arising out of artificial insemination. Although the court held that a child conceived by artificial insemination with semen from a third-party donor was illegitimate, it ruled that the former husband of the child's mother was obligated to support the child.

After marriage, it was discovered that the husband was impotent. The parties agreed that the wife would be artificially inseminated with donor semen. A child was born and the husband was listed as its father on the birth certificate.

Subsequently, the marriage was annulled on the ground, admitted by the husband, that the marriage was not consummated. The mother then sought support for the child.

Although the court found that the child was illegitimate under the common law and the statutory law of the state, it ruled that this did not free the former husband of an obligation to support the child. It held that the husband, by his written consent to the artificial insemination impliedly promised to furnish support for any offspring resulting therefrom. By the wife's concurrence and submission, this promise ripened into an implied contract, the court concluded. It said that the wife was induced to accept artificial insemination by the husband's request, so that he was equitably estopped from denying his obligation to support the child.

Gursky v. Gursky, N.Y. Sup. Ct., Kings Co. (N.Y., July 26, 1963). ◄

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INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—August, 1963

Disease	August 1963	July 1963	June 1963	August 1962	August 1961
Animal Bites	1,019	833	1,036	955	936
Chickenpox	40	58	758	16	35
Conjunctivitis	48	44	77	50	45
Diphtheria	0	2	0	0	0
Dysentery, Unspecified	270	6	111	29	8
Gonorrhea	323	245	233	Not Available	
Impetigo	135	78	75	119	171
Infectious Hepatitis	47	25	81	31	114
Infectious Mononucleosis	14	8	31	8	13
Influenza	105	90	240	221	172
Measles (Rubeola-Rubella)	111	241	1,556	55	108
Meningitis, Meningococcal	0	2	3	2	2
Meningitis, Other	7	7	12	0	14
Mumps	86	101	519	35	74
Pertussis	62	102	29	51	9
Pneumonia	64	60	154	39	83
Poliomyelitis	0	0	1	1	3
Streptococcal Infections	219	132	241	244	244
Syphilis					
Primary & Secondary	1	6	7	Not Available	
All other Syphilis	100	114	103	Not Available	
Tinea Capitis	3	2	2	0	1
Tuberculosis (Active)	146	110	107	149	86

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GENERAL PRACTICE

Robert J. Haines, 209 Chosin Circle, Camp Pendleton, Calif.—Available August, 1964.

Daniel Dorman, 840 West End Ave., New York 25, N. Y.

SPECIALISTS

Ralph E. Reeds, Univ. Hospital, Div. of Dermatology, Minneapolis, Minn.—*Dermatology*

Paul M. Aney, 816 East 58th St., Chicago 37, Ill.—*Dermatology—Available Sept. 1, 1964*

William J. Floyd, 3105 South Polk St., Amarillo 79109, Texas—*ENT*

Ramon S. Dunkin, 3551 Brewer Dr., Indianapolis 46224, Ind.—*Internal Medicine—Chest and Cardiology*

Don L. Marketto, Jr., 202 Letterkenny Ave., White Sands Missile Range, New Mexico—*OB-GYN—Available July, 1964*

Pendleton E. Thomas, III, 604 King's Grant Rd., Virginia Beach, Va.—*OB-GYN—Teaching appointment.*

Donald E. White, 122 West Alosta Ave., Glendora, Calif.—*Ophthalmology*

Eugene I. DiSlavo, Rodriguez U. S. Army Hospital, APO 851, New York, N. Y.—*Orthopedics*

Jack F. Martin, 1341 4th Ave., S. W., Rochester, Minn.—*Orthopedics*

George R. Kaftan, PHS Indian Hospital, Talihina, Okla.—*Pediatrics—Available July, 1964*

John A. Lupas, 6824 Algon Ave., Philadelphia, Pa. —*Pediatrics—Available Sept., 1964*

Charles M. Klein, 6721 Arnette, Millington, Tenn. 38053—*Radiology—Available July, 1964*

Harry B. Ditmore, 201 Custer Ave., Evanston, Ill. —*Thoracic Surgery—Pediatric*

Eric T. Lincke, Station Hospital, NAS Whidbey, Oak Harbor, Wash.—*General Surgery*

Warren W. Babcock, Jr., 18254 Oak Dr., Detroit 21, Mich.—*General Surgery*

Warren M. Greene, 9 Standord Road West, Rochester, N. Y. 14620—*Urology—Available July, 1964*

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GRACE M. COLLET, Ph.D.
VERNON W. SHAFER, Ph.D.
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MARY JANE McCONAUGHEY, M.S.W
CHARLOTTE M. BERG, M.S.W.
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PAULINE L. TOOILL, R.R.L.
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ESTHER L. SIMPSON, R.N.
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Recreational Therapist

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In 1962, Indiana Blue Cross-Blue Shield continued to do a much better job for direct pay members than was done by private insurance companies for their individual (non-group) membership.

We paid out in benefits 89.9% of each direct pay membership fee dollar received. The average pay-out for private insurance companies doing business in this state was only 63% for their individual (direct paying) hospital and medical coverage.

During the year we saved our direct pay members $10,500,000. That's the difference between what we charged for the benefits furnished, and what would have been charged by an average commercial insurance company (with a 63% pay-out) for the same coverage.

Blue Cross-Blue Shield direct pay members received in benefits almost 27 cents more of each membership fee dollar than was received by those individuals with commercial coverage.

The percentage of membership fees received that is returned to members in benefits is the most important test of performance in the health insurance field. The comparison above, as shown recently in the *Argus Chart of Health Insurance*, published by the National Underwriters Company, proves that Hoosiers can't buy individual health insurance protection anywhere else at a price that is competitive with Blue Cross-Blue Shield.

The record made by private companies selling individual (direct paying) hospital and medical coverage is not good. They are dealing with individuals who are unable to determine the value of the insurance they are buying and are attracted by the seemingly low fees. Included among those furnished this type of coverage are those who have the most need for adequate protection at a minimum cost—the 65 and over and the people of low income.

Blue Cross-Blue Shield believes that money paid in for health care should be paid out for health care, and operates on that basis. This policy is especially important in the area of individual, direct paying members.

Under some forms of widely promoted commercial health insurance, individuals not eligible for group coverage often find their protection not only costly but grossly inadequate. In addition, the percentage of their health care dollar used for actual payment of benefits is often shockingly low.

For example, in 1962 three private companies with the poorest performance paid out less than 50 cents of each dollar received. One of the largest companies in the direct paying field reported a premium earned of $140,221,069, and claims incurred totaling only $89,785,772. Another large company took in $117,044,686 and paid out only $73,843,245. This type of performance is reported year after year, and millions upon millions of dollars paid in for health care are never paid out for health care.

It is Blue Cross-Blue Shield policy to furnish maximum benefits for the lowest possible fees—and to make available adequate protection to the full range of the population, good risks and bad. Blue Cross-Blue Shield believes this approach is the best solution to the problem of financing health care for the people of Indiana. ◄

W. C. Huddlestone
Public Relations Division

ABSTRACTS

BOOK REVIEWS

SYSTEM OF OPHTHALMOLOGY— VOLUME VII THE FOUNDATIONS OF OPHTHALMOLOGY

Duke-Elder, Sir Stewart. The C. V. Mosby Company, St. Louis, 1962. 829 pages. 471 illustrations. 11 colored plates.

Sir Stewart Duke-Elder states in this volume, "The ultimate cause and nature of all disease are included in Heredity and Pathology, and it must first be diagnosed and then treated—the four subjects Heredity, Pathology, Diagnosis, and Therapeutics constitute the foundation of Ophthalmology."

He writes the section on Heredity himself with a precise and lucid description of the general principles, physiochemical basis, and general mechanism of genetics. He also includes a section on human genetics and ophthalmological genetics.

Norman Ashton collaborates with Duke-Elder on the Pathology section which contains many beautiful illustrations and is divided into diseases of metabolism, connective tissue diseases, degenerations, disorders of growth, disorders of circulation, and inflammations, immunity and hypersensitivity.

The section on Diagnosis is written by Redman J. H. Smith and Duke-Elder. This section begins with the earliest methods of ocular examination and is expanded to include the newest technics and instruments such as ultrasonography, pupillometry, opthalmoldynamometry, radioactive tracers and electroretinography.

The final sections on ocular therapeutics, written by Duke-Elder with a sub-section on Radiotherapy by M. Ledeman, includes a review of the history of ocular therapeutics and a superb section of Pharmacology of surface effectors, systemic effectors, anti-infective agents and biological agents. This volume is concluded with a detailed section on physical therapy, including radiotherapy.

Every ophthalmologist will find this volume an essential addition to his library. Duke-Elder has been the ultimate authority in almost every aspect of ophthalmic literature; with this volume he has brought up to date much of the material which was so extensively recorded in his earlier volumes of the *Textbook of Ophthalmology.*

JOHN R. CASSADY, M.D.
South Bend

SELECTED READINGS IN PATHOLOGY

Long, Esmond R., M.D., Ph.D. 2d ed. Chas. C Thomas, Springfield, Ill., 1963. 306 pages, 25 plates, several tables. $8.50.

Whatever pathology I know was taught to me by Professor Long and the late Dr. Richard Jaffe of Cook County Hospital, Chicago, Ill. My areas of ignorance I owe strictly to myself. However, after four decades of medicine, I think I can discuss this charming classic without undue prejudice. Dr. Long has made his reputation in the field of chemotherapy of tuberculosis; his classic monograph in that field needs no testimonials from anyone.

The present volume is a labor of full maturity and ripe judgment. The author has chosen no less than 67 immortals in his chosen branch of medicine and has lovingly selected brief excerpts from their writings that are, in his opinion, most representative of their permanent contributions to Medicine.

This volume can be picked up and read at random in the spare one-half hour when others turn on TV westerns. Each little chapter is a nugget of purest gold; re-reading does not make it stale: the flavor is always there.

For relaxed reading, for a present to a medical (or para-medical) friend—well, I cannot think of a better item.

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

MEDICINE AND THE STATE

Lynch, Matthew J., M.D., M.R.C.P. Lond., F.C.A.P., Raphael, Stanley S., M.B., B.S., London. Charles C Thomas, Springfield, Ill., 1963. 449 pages including index. 67 tables. $9.75.

Medicine and the State is indeed a timely and well done study of the development of socialized medicine in Germany, Austria, Russia, Britain, New Zealand, Australia and Sweden. The first chapter, "In Search of the Ideal," is an excellent summary of the arguments used by proponents of socialized medicine and as such should be well known by all doctors of medicine. The next 23 chapters deal with the development and system of socialized medicine in the seven countries. One is continuously impressed by the power of the governments who have set about to develop a socialized system of medical practice. No less impressive is the evidence of the extremes of misrepresentation, deceit, bad faith, and oblivion to medical advice practiced by many of these governments. The futility of resistance by the medical profession is sometimes frightening.

The second part of the work is composed of four chapters of appraisal of these systems from the standpoint of the patients, vital statistics, the medical profession and economic aspects. These chapters are excellent for the faint-hearted, apathetic, resigned or indifferent. One can hardly read them and not take a stand.

The 29th and final chapter represents the authors' conclusions. This is divided as follows: "Why Socialized Medicine Fails," "Idealism and Liberalism," "Planning in Medicine," and "The Right and Means to Good Health." In this section is some philosophy with which some would dis-

Continued



In Sprains, Strains and Muscle Spasm, 'Soma' Compound

numbs the pain...not the patient

A potent analgesic and a superior muscle relaxant

1. A sprain or fracture is not a big clinical problem—but it does hurt. And if there is housework to do and kids to mind, the patient needs something to numb the pain.

2. A.P.C. compounds have limited usefulness; and the patient can buy them without your prescription. Unfortunately, most of them are too mild to be effective for sprains—and more potent products too often make the patient feel 'dopey'.

3. 'Soma' Compound is ideal in these cases. Since it contains both 'Soma' (carisoprodol) and acetophenetidin it is both a potent analgesic and a superior muscle relaxant; it also contains caffeine to offset any drowsiness *("numbs the pain...not the patient")*.

4. Why not try 'Soma' Compound? Dosage is 1 or 2 tablets q.i.d. For more severe pain, try 'Soma' Compound + Codeine. Dosage: 1 or 2 tablets q.i.d.

5. Hypersensitivity to carisoprodol may occur rarely. Codeine may produce addiction, nausea, vomiting, constipation or miosis.

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carisoprodol 200 mg., acetophenetidin 160 mg., caffeine 32 mg.

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agree; for example, "planning" is taken too much to task in the opinion of this reviewer. It is unfortunate that the authors do not elaborate more on their solution for "the unfortunate minority . . . the remainder should assume responsibility."

But here is a book which should not be limited to medical libraries. It should be read by all doctors, given to all members of Congress, and widely reviewed in all possible fashions.

JENE R. BENNETT, M.D.
South Bend

Abstracts From Various Literature, Prepared by AMA

RETROPERITONEAL RUPTURE OF THE DUODENUM DUE TO BLUNT NON-PENETRATING ABDOMINAL TRAUMA

Retroperitoneal rupture of the duodenum should be suspected after severe non-penetrating trauma to the upper part of the abdomen or the back. While the diagnosis may be obscured clinically by other intra-abdominal injuries, it can frequently be made from plain films of the abdomen. The presence of free retroperitoneal air, particularly about the right kidney, is an important diagnostic clue. Water-soluble contrast medium should be used to study the stomach and duodenum where the diagnosis is uncertain, and in the postoperative period if a duodenal fistula is suspected. The alert radiologist may facilitate early diagnosis and surgical intervention if aware of this entity, where inadequate or delayed treatment can result in a 75% to 90% mortality.

Gould, R. J., Thorwarth, W. T.: Retroperitoneal Rupture of the Duodenum Due to Blunt Non-Penetrating Abdominal Trauma, *Radiology* 80:743 (May) 1963.

W. B. SAUNDERS COMPANY features the following new books and new editions in their full page advertisement appearing elsewhere in this issue:

Current Pediatric Therapy — Edited by Gellis and Kagan

This new book gives you the best treatments, currently in use by leading authorities, for over 300 diseases and disorders that afflict children.

MAINLAND—*Elementary Medical Statistics*

A New (2nd) Edition — revised to bolster your statistical thinking and also your use of the standard statistical formulas and procedures.

TRISOMY IN A MENTALLY RETARDED PATIENT

The occurrence of a supernumerary autosome among the group of X-6-12 chromosomes has been observed in a Negro man aged 54 years. Clinical features included (1) mental retardation (IQ less than 30), (2) bony changes (hypertelorism, depressed bridge of nose, prominent supraorbital ridges, tower-skull deformity, congenital angulation of the odontoid process of the axis vertebra, and medial angulation of both big toes), (3) moderate degree of hypogenitalism and partially undescended testicle. Leukocyte cultures revealed 46/47 mosaicism. The extra chromosome (comparable to number 11) was considered an autosome, and not an extra X-chromosome, because (1) on autoradiography it showed relatively early replication in the synthetic period, (2) buccal smears showed male sex-chromatin pattern, and (3) there were no "drumsticks" among 500 consecutive neutrophils in smears. Perhaps the trisomic condition would have been lethal, if present in all cells of the body, and only the coexistence of 46-chromosomal cells of normal karyotype permitted survival.

El-Alfi, Omar S., Powell, H. C., Biesele, J. J.: Possible Trisomy in Chromosome Group 6-12 in a Mentally Retarded Patient, *Lancet* (London) 1:700 (March 30), 1963.

CARCINOMA OF THE STOMACH IN YOUNG PATIENTS

Ten cases of carcinoma of the stomach in patients under 31 years of age are reported. All were inoperable by the time the patient reached the surgeon. The delay in seeking surgical treatment was due in all cases to a failure to suspect the diagnosis due to the patient's age. No gastric ulcer should be treated medically for more than one month if a radiological deformity persists.

Stock, F. E.: Carcinoma of the Stomach in Young Patients, *Lancet* (London) 1:805 (April 13), 1963. ◄



Kenneth Bush Rejoins ISMA Staff As Administrative Assistant

Mr. Kenneth W. Bush joined the staff of the Indiana State Medical Association on October 1.



Mr. Bush will serve as administrative assistant to Mr. James A. Waggener, the executive secretary.

For the last six years Mr. Bush has served with the Indiana Heart Association, first as public relations director and for the last year as executive director of that organization.

Mr. Bush, who served for four years in the U.S. Army on active duty in France during World War II was retired from the service as a result of combat injuries. This will not be Mr. Bush's first connection with ISMA. He was a field secretary to the Association from 1954 to 1957.

Public Health Service Grants $62,362 to I.U., $80,300 to Purdue

Grants by the Public Health Service in the Neurological and Sensory Disease Service Program this year went to Indiana University in the amount of $62,362. The grant is to continue the university's training course designed to improve the nursing care of patients with cerebral dysfunction originating in childhood.

Purdue University received $80,300 for continuing a graduate training program in clinical audiology, aural rehabilitation and hearing conservation.

Medical Officer Vacancies Available On FTC Scientific Staff

The Federal Trade Commission has medical officer vacancies on its scientific staff. No specialized medical experience is necessary, although training in internal medicine, pharmacology or nutrition would be helpful.

After January 1, 1964 the entrance salary will be $15,415 with periodic increases to $19,015. Interested physicians may write to Dr. George Dobbs, Associate Chief, Division of Scientific Opinions, Federal Trade Commission, Washington 25, D. C.

ATS Research Grant Applications Accepted Now by Thoracic Society

Applications for research grants awarded by the American Thoracic Society, medical

Continued

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NEWS NOTES

Continued

section of the National Tuberculosis Association, will be received between now and December 15, 1963.

Grants will be awarded for medical and social research in the field of respiratory diseases, including tuberculosis, for the year beginning July 1, 1964. For further information and forms, write to: Division of Research & Statistics, American Thoracic Society, 1790 Broadway, New York 19.

Applications Now Being Accepted For Wyeth Pediatric Fellowships

Applications are being accepted for Wyeth Pediatric Residency Fellowships. Each Fellowship provides $4800 for the two-year period of residency.

The Fellow is free to choose any residency accredited by the AMA, and will receive the normal stipends in addition to the Wyeth award. Full details may be obtained by writing Dr. Philip S. Barba, University of Pennsylvania School of Medicine, Philadelphia, 4. ◄

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Annual Meeting Dates of Professional Medical and Allied Organizations

INDIANA STATE SOCIETY OF ANESTHESIOLOGISTS
Date May, 1964
Place Indianapolis

BONE AND JOINT CLUB
Date October 16
Place The Athenaeum, Indianapolis

INDIANA ACADEMY OF GENERAL PRACTICE
Date March 11-12, 1964
Place Murat Temple, Indianapolis

INDIANA HOSPITAL ASSOCIATION
Date October 23-25
Place French Lick, Indiana

INDIANA NEUROPSYCHIATRIC ASSOCIATION
Date Second Wednesday of every month, October through May
Place The Athenaeum, Indianapolis

INDIANA OBSTETRICAL AND GYNECOLOGICAL SOCIETY
Fall Meeting
Date November 13
Place Marott Hotel

Annual Meeting
Date January 15, 1964
Place Marott Hotel

INDIANA ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY
Date May 6-7, 1964
Place Marott Hotel, Indianapolis

INDIANA ASSOCIATION OF PATHOLOGISTS
Date Dec. 1, 1963
Place Methodist Hospital
Annual Seminar
Date May 17, 1964
Place Veterans Administration Hospital

INDIANA CHAPTER OF THE AMERICAN ACADEMY OF PEDIATRICS
Date October 16
Place Indianapolis

INDIANA PHARMACEUTICAL ASSOCIATION
Mid-Year Meeting
Date January, 1964
Place Indianapolis



a Private Psychiatric Center at Jacksonville, Illinois, *since 1901*

Complete psychiatric treatment in an environment for cure. A 60 bed hospital with the most modern diagnostic and therapeutic equipment for the treatment of nervous and mental disorders.

LICENSED: Illinois Department of Mental Health

MEMBER: Illinois Medical Service (Blue Cross-Blue Shield)

ISMA Members Invited to Seventh Annual Diabetes Symposium Nov. 15

The Diabetes Association of Greater Chicago will conduct its Seventh Annual Symposium on Diabetes at Presbyterian-St. Lukes Hospital in Chicago on Friday, November 15. Members of ISMA are invited to attend. The fee for non-members is $25.

The program includes a symposium on clinical, physiological and biochemical aspects of hyperlipemia, and discussions on Hurler's syndrome, diabetic neuropathy, sucrose and fructose intolerance and a review of the use of hypoglycemic agents.

The Academy of General Practice allows credit hour for hour in Category II. Inquiries should be addressed to the Association at 620 N. Michigan Avenue, Chicago, 11.

Postgraduate Courses for Doctors Offered by General Hospital

The Marion County General Hospital will conduct postgraduate courses for physicians again this year. All courses have been approved by the American Academy of General Practice.

Management of Diabetes Mellitus will be covered on Nov. 13, 1963. A course in Dermatology will be given in conjunction with I. U. Medical Center on January 22 and 23, 1964. Non-Tuberculous Pulmonary Disease will be discussed on April 22, 1964.

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Members of ISMA will receive detailed information on the courses and the faculties.

American Epilepsy Federation Sets Annual Meeting Oct. 31-Nov. 1

The American Epilepsy Federation will hold its annual meeting October 31 and November 1, 1963, in Evansville, Indiana. It is planned that the first Midwestern Institute on Epilepsy will be held in conjunction with this, with the medical program planned for October 31st at the St. Mary's Hospital in Evansville.

The scientific session will consist of a morning devoted to individual papers dealing with the pediatric, psychiatric, general medical and neurosurgical aspects of epilepsy. Included in the program will be a discussion in reference to workmen's compensation.

There will also be a sound-color film demonstrating various seizure patterns. In the afternoon a panel discussion will be held dealing with the current problems in the therapy and evaluation of epilepsy.

Hahnemann Medical College Lists "Cardiovascular Drug Therapy" Course

The Hahnemann Medical College and Hospital will conduct a postgraduate course on "Cardiovascular Drug Therapy" January 20-23, 1964, at the Marriott Motor Hotel, Philadelphia.

The purpose of this symposium is to evaluate the current cardiovascular armamentarium. The rationale and drug spectrum of antihypertensive drugs, antianginal compounds, diuretic agents, vasopressors, anticoagulant and antiarrhythmic drugs and cardiotonic compounds will be explored in relation to their clinical pharmacologic application.

Further information may be obtained from the college. ◄

Deaths

Mary L. Bartholomew, M.D.

Dr. Mary L. Bartholomew, 63, a specialist in obstetrics practicing in Goshen for the past 20 years, died July 12 at Goshen General Hospital.

Dr. Bartholomew was graduated from the I. U. School of Medicine in 1939 and was a member of the Elkhart County Medical Society.

Henry S. Leonard, M.D.

Dr. Henry S. Leonard, 88, Indianapolis surgeon and former president of the Indianapolis Medical Society, died July 4 at Methodist hospital.

A member of the surgical staff at General Hospital since 1918 and chief of staff there in 1934-37, Dr. Leonard was also a member of the surgical staffs at Methodist Hospital and St. Vincent's Hospital. Dr. Leonard was a member of the ISMA 50-Year Club and the Marion County Medical Society.

Earl R. Snyder, M.D.

Dr. Earl R. Snyder, practicing physician in Troy for 59 years, died August 2 at his home. He was 83.

Dr. Snyder, a graduate of the University of Louisville, had retired two years ago. He was the oldest doctor in Perry County. Dr. Snyder was a member of the ISMA 50-Year Club and had been president of the Perry County Medical Society in 1960.

George T. Tennis, M.D.

Dr. George T. Tennis, 57, former physician at the Indiana State Farm, died August 22 at his home.

Dr. Tennis had practiced medicine at Greencastle since he retired from the penal farm in 1945. He was a graduate of the I. U. School of Medicine and a member of the Putnam County Medical Society.

J. Wiley Thimlar, M.D.

Dr. J. Wiley Thimlar, practicing Ft. Wayne physician for 52 years, passed away August 12 at his home.

The 79-year-old doctor was a native of Milan Township and had resided in Ft. Wayne since completing his medical education at the Chicago College of Medicine in 1911. Dr. Thimlar was a member of the ISMA 50-Year Club and the Allen County Medical Society.

O. A. Tucker, M.D.

Dr. O. A. Tucker, 77, Daleville, died unexpectedly June 28 at his office.

Dr. Tucker, who had practiced medicine in Daleville for 54 years, was a graduate of I. U. Medical School. He was a member of the staff of Ball Memorial Hospital, a member of the Delaware-Blackford County Medical Society and the ISMA 50-Year Club. ◄

CALIFORNIA

INTERVIEWS

CINCINNATI—November 9, 11

for Psychiatrists, Internists, General Practitioners, Pediatricians

who are interested in positions with California State Mental Health, Youth Authority and Corrections programs. Starting salaries range from $13,332 to $17,028.

Please write immediately:

Mr. William F. Webster
State Personnel Board
Sacramento, California 95814

County News

Benton

Drs. A. L. Coddens, Earl Park and Donald L. McKinney, Otterbein, have been re-elected president and secretary, respectively, of the Benton County Medical Society. Dr. McKinney also was named delegate.

Clay

The Clay County Medical Society met August 13 in Brazil with six members present.

The members discussed the blood bank program which has been accepted by the Clay County Hospital.

Clinton

The Clinton County Medical Society met August 27 at Clinton County Hospital. Dr. Albert E. Applegate has been named president of the society and Dr. Harry T. Stout will serve as vice-president and secretary.

Jasper

Dr. Robert W. Greene has been elected president of the Jasper County Medical Society. Assisting him will be Drs. Paul A. Williams, secretary-treasurer; Kenneth R. Ockerman, delegate and Francis E. O'Brien, alternate. All of the new officers are from Rensselaer.

Jefferson-Switzerland

Twenty members attended the Sept. 2 meeting of the Jefferson-Switzerland County Medical Society. Field Secretary Robert Amick attended the meeting and discussed the coming annual meeting of the ISMA.

Lawrence

The Lawrence County Medical Society met Sept. 4 at the Dunn Memorial Hospital. Field Secretary Amick attended this meeting also and discussed the annual meeting and the Blue Cross-Blue Shield resolution.

Shelby

Dr. Boynton Booth spoke on "Office Dermatology" before the Shelby County Medical Society meeting Sept. 4. Nineteen members attended the meeting at the W. S. Major Hospital.

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'Meprospan'-400 brand of meprobamate contains 400 mg. in sustained-release form. One capsule smooths out the anxious patient's emotional peaks and valleys for 10 to 12 hours — and provides these other advantages:

1. **Especially suitable for maintenance therapy.** Patients whose anxiety has diminished to a mild or moderate level still require a certain amount of tranquilization throughout the day. Sustained-release action is ideally suited to this type of patient.
2. **Simpler dosage schedule.** Since one capsule of 'Meprospan'-400 (meprobamate, sustained release) acts 10 to 12 hours, the patient enjoys a much simpler dosage schedule than with tablets — and is less likely to forget to take the medicine.

Side Effects: Rarely, skin reactions. May increase effects of excessive alcohol. Use with care in patients with suicidal tendencies. Massive overdosage may produce coma, shock, vasomotor and respiratory collapse. Consider possibility of dependence in patients with history of drug or alcohol addiction.

Available: *'Meprospan'-400* (meprobamate, sustained release) contains meprobamate 400 mg. *'Meprospan'-200* (meprobamate, sustained release) contains meprobamate 200 mg. Both potencies in bottles of 30. **Usual dosage:** One 400 mg. capsule or two 200 mg. capsules at breakfast; repeat with evening meal.

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Association News

EXECUTIVE COMMITTEE

August 21, 1963

The Executive Committee met in Parlor D of the Drake Hotel, Chicago, at 6:00 p.m., August 21, 1963, with the following present:

Wendell E. Covalt, M.D., chairman; Ralph V. Everly, M.D.; Maurice E. Glock, M.D.; Don E. Wood, M.D.; Kenneth O. Neumann, M.D., and James A. Waggener, executive secretary.

Guests: Robert Amick, Howard Grandstaff, Kenneth Bush.

Membership Report:

Number of members as of Dec. 31, 1962		4,340
1963 members as of July 31, 1963:		
Full dues paying	3,748	
Residents and interns	143	
Council remitted	44	
Senior	338	
Honorary	2	
Military	55	
Total 1963 members as of July 31, 1963		4,330
Number of members as of July 31, 1962		4,307
Gain over last year		23
Number of AMA members as of July 31, 1963		4,222
Total 1962 AMA members as of July 31, 1962		4,184
Gain over last year		38
1963 AMA members: Dues paying	3,637	
Exempt, but active	585	
		4,222
Number who have paid state dues but not AMA dues as of July 31, 1963		108

Building Matters

Dr. Everly brought up several matters regarding the building and upon motion of Drs. Wood and Everly, the Executive Committee is to recommend to the Building Committee that if the building is used by medical and para-medical groups during working hours that these groups be allowed to use the building at the discretion of the executive secretary without charge. Medical and para-medical groups are defined as organizations having M. D.'s who would be the hosts for the various groups.

Dr. Everly reported that the furniture which was purchased by the auxiliary for the basement had arrived.

A letter was read from Berling & Sons, Inc., making a proposition to the Association that they would allow $100.00 of the $500.00 still owing them to be retained by the Association with the understanding that any time the Association felt the cement walks should be replaced they would do this for a sum of $100.00. This then would make the Association paying the balance of the contract sum of $400.00 to Berling & Sons.

Also read was a letter from Lennox, Matthews, Simmons and Ford, Inc., the architects, stating that they felt the proposition of Berling & Sons was a reasonable offer and should be accepted.

Upon motion of Drs. Glock and Everly, the proposition of Berling & Sons was accepted.

Dr. Everly also reported on the hearing which had been held concerning the construction of a two-story insurance building adjacent to the Association's property on the south.

The contract of the Circle Alarm Corporation for renewal was presented to the Committee and upon motion of Drs. Wood and Neumann the contract renewal was approved.

Dr. Everly read correspondence from the Richard Rush Studio Inc. of Chicago concerning the bust of Hippocrates. Upon motion of Dr. Wood, taken by consent, Dr. Everly was asked to view the work of this studio and if he approved of its work, to obtain a bust of Hippocrates for the lobby.

Treasurer's Office

In the absence of the treasurer the secretary read the treasurer's report, which was accepted on motion of Drs. Wood and Glock.

Annual Convention, Indianapolis, October 15, 16, 17, 1963

Upon motion of Drs. Wood and Glock the final meeting of the House of Delegates was set for 3:00 p.m., Thursday, October 17, to be held at the Murat Temple in either the Candidates Room or the basement dining room.

The secretary reported that the committee in the past had established a policy of requesting the immediate past president to assume the chairmanship for the past presidents' luncheon. Due to the untimely death of Dr. Harry Stimson, the immediate past president and on motion of Drs. Wood and Everly, the committee voted to request Dr. Owsley to again act as chairman of this portion of the program.

Legislation

Dr. Wood talked on the current legislation before Congress which is going to be of interest to medicine concerning the humane treatment of animals in medical research programs. He also reported that all public welfare grants and all grants of national institutes of health are going to be placed under scrutiny by a committee of the Congress, and that hearings on the King-Anderson Bill would probably be heard by the House Ways and Means Committee in September.

Organization Matters

Report of the Executive Committee to the House of Delegates was approved with revisions being authorized, on motion of Drs. Wood and Glock.

A letter was read from the Indiana State Board of Health concerning the recommendation of the Commission on Public Health of the Indiana State Medical Association that erythromycin be added to the prophylaxis program for rheumatic fever. The addition of this drug was approved on motion of Dr. Glock and taken by consent.

A letter from the University of Louisville School of Medicine requesting use of the mailing list for notification of Indiana physicians of their post-

graduate program was read. This request was approved on motion of Dr. Everly and taken by consent.

Request of Dr. Jack Hickman, director of Medical Education of the Health and Hospital Corporation of Marion County, for use of the mailing list for advising physicians of three postgraduate programs, was approved on motion of Dr. Glock and taken by consent.

Letter was read from Dr. Anne S. Nichols concerning the publicity given Dr. Herbert Dester. Upon motion of Drs. Neumann and Everly it was suggested that the Association solicit an opinion from the county medical society concerning the medical care system in use at the State Farm.

A letter from Dr. George Davis, chairman of the Governor's Commission on Aging and the Aged, soliciting the use of the name of the Indiana State Medical Association as a cooperating agency at the Indiana Conference on Aging and Aged, to be held in September, and the comments of Dr. Nathan Salon, chairman of the Commission on Aging, recommending that the Association participate as a cooperating agency, were read, and use of the Association's name was approved by consent.

The secretary brought up the matter of dues of two members of the Marion County Medical Society. Upon motion of Dr. Neumann, taken by consent, this matter is to be referred to Dr. Albert Donato, councilor of the Seventh District, for his recommendation and comment.

A letter from the Indiana Division of the American Cancer Society concerning the use of the Association's name as a cooperating agency in the forthcoming clinical cancer conference was reviewed and the committee was informed that use of the Association's name had been authorized by Dr. Glock. Approval of this action was given by consent.

A letter was read from Indiana University acknowledging the gift of the Association in memory of Dr. Stimson.

A letter was read for the information of the committee concerning a new series of health posters now available through the American Medical Association.

Letters sent by the Indiana Pharmaceutical Association to Dr. Joseph McDonald, chairman of the Commission on Interprofessional Relations, and to Dr. Charles Alvey, president of the Indiana Academy of General Practice, together with a resolution regarding the labeling of prescriptions, which has been adopted by the Pharmaceutical Association, were read for the information of the committee.

Request of the Commission on Public Health for a deficit appropriation on its budget was approved by consent.

Recommendation of the Commission on Public Health regarding tonometry was reviewed and upon motion of Drs. Glock and Covalt the recommendation was accepted, with deletion of the words "by an ophthalmologist," which would make the recommendation then read: "After due consideration of the problems of doing tonometry, the commission recommends that none other than physicians suitably trained in this technic should do tonometry."

The failure of the Joint Council to Improve the Health Care of the Aged to obtain facilities at the Medical Center was reported to the committee, and also the request of the Joint Council to meet in the headquarters building if all else failed. It was taken by consent that it would be better not to hold the meeting in the headquarters building.

Also reported for the information of the committee was acknowledgment that Dr. Blasingame had received the nominations made to the Board of Trustees by the Association for appointment of Indiana physicians to various committees and councils of the AMA.

Also reported was a letter of thanks from the Student American Medical Association for the sustaining membership given to this organization by the Indiana State Medical Association.

Future Meetings

A letter of invitation to attend the Western Conference of Blue Shield Plans was reviewed and no action taken.

A notice of the Fifth National Conference on the Medical Aspects of Sports was reviewed for the information of the Committee.

There being no further business, the committee adjourned to meet again at 4:00 p.m., September 14, 1963.

EXECUTIVE COMMITTEE

September 14, 1963

Present: Wendell E. Covalt, M.D., chairman; Ralph V. Everly, M.D.; Maurice E. Glock, M.D.; Don E. Wood, M.D.; Kenneth O. Neumann, M.D.; Irvin W. Wilkens, M.D., and Ottis N. Olvey, M.D.

Robert Hollowell, attorney, and James A. Waggener, executive secretary.

Membership Report

Number of members as of December 31, 1962		4,340
1963 members as of August 31, 1963:		
Full dues paying	3,754	
Residents and interns	144	
Council remitted	44	
Senior	338	
Honorary	3	
Military	57	
Total 1963 members as of August 31, 1963		4,340
Number of members as of August 31, 1962		4,309
Gain over last year		31

Number of AMA members as of August 31, 1963		4,237
Total 1962 AMA members as of August 31, 1962		4,186
Gain over last year		51
1963 AMA members: Dues paying	3,649	
Exempt, but active	588	
		4,237
Number who have paid state dues but not AMA dues as of August 31, 1963		103

Building Matters

Discussion was held concerning the letter of acceptance of the proposition of Berling & Sons on the sidewalks, and inasmuch as the interior east wall has not been repainted it was suggested that the final payment not be made until this has been completed.

The chairman of the Building Committee reported on the investigation he had made concerning the bust of Hippocrates.

The chairman of the Building Committee took the Executive Committee on a tour of the basement to show what is being done there in the tiling and painting. Upon motion of Drs. Neumann and Wood, the Executive Committee is to recommend to the Council that the Building Committee be authorized to proceed with the finishing of the basement and the installation of kitchen facilities as soon as funds become available.

Treasurer's Office

The report of the treasurer was accepted by consent.

Annual Convention, Indianapolis, October 15, 16 and 17, 1963

A letter from the National Society for Medical Research requesting that several matters be placed before the annual convention was read and it was taken by consent that there be no action on this request.

Report on the sale of exhibit space was noted and accepted by consent.

On motion of Drs. Everly and Wilkens, the charge for the annual dinner was set at $7.00 per person.

Upon motion of Drs. Wood and Glock, the senior and junior medical students are to be extended an invitation to attend the scientific meetings of the annual convention.

Legislation

Dr. Wood reported on the status of the Kerr-Mills enabling legislation which was passed by the sixty-third session of the State Legislature.

Organization Matters

A letter addressed to the president of the Association concerning reappointment of Drs. David L. Adler, Columbus, and James W. Crain, Williamsport, to the Advisory Hospital and Health Center Planning Council was read and the reappointment of these men was approved by consent.

A letter from the American Medical Association regarding the Association or a member of the Association acting as host for a luncheon meeting of industrial and business firms for the purpose of encouraging these firms to contribute to the AMA-ERF Loan Guarantee Program was presented, and upon motion of Drs. Glock and Neumann consideration of this matter was tabled until the November meeting of the Executive Committee.

A note from Mrs. Walter L. Portteus expressing appreciation for the remembrance of the Association in the passing of Dr. Portteus was read for the information of the committee.

A letter addressed to Dr. Anne Nichols of Greencastle as requested by the committee at its August meeting was read for the information of the committee.

The membership matters of Marion County, considered at the August meeting of the Executive Committee and referred to the councilor for the district, were reported upon, a copy of the letter of transmittal being reviewed for the information of the committee and report made that no reply had been received as yet.

The activities of the Ad Hoc Committee in the transfer of professional services from Blue Cross to Blue Shield were reviewed for the information of the committee.

Literature being distributed by the Indiana Institute of Medical Assistants was reviewed and upon motion of Drs. Wood and Wilkens, the secretary was instructed to forward a knowledgeable letter concerning this school, pointing out that it is not approved by the State Medical Association, to the physicians whose names are listed in the literature.

Future Meetings

Dr. Everly was named to represent the Association at the President's Luncheon of the Kentucky State Medical Association at Lexington, Kentucky on September 25.

The secretary was given permission to attend the dinner of the Michigan State Medical Society at Grand Rapids on September 26.

Dr. Emmett B. Lamb is to be requested to represent the Association at the Governor's Third Conference on the Handicapped, to be held at the Student Union Building at I. U. Medical Center on October 10 and 11.

Dr. Peter Petrich is to be requested to represent the Association at the AMA Conference on Physicians and Schools, to be held in Chicago on October 10, 11 and 12.

Dr. Wood was named to represent the Association at the annual meeting of the Board of Directors of the Indiana State Chamber of Commerce at French Lick on October 17, 18 and 19.

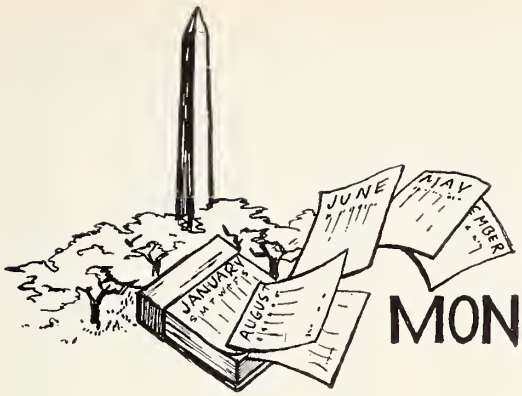
Dr. Wood was also named to represent the Association at the annual meeting of the Indiana Hospital Association at French Lick on October 24.

Dr. Harry Klepinger was authorized to attend the AMA Conference on International Health, to be held in Chicago October 30 and 31, or to designate a representative.

Dr. Wood accepted the invitation to attend the annual convention of Licensed Practical Nurses, to be held in Indianapolis on October 31.

Dr. Charles Alvey or a person designated by him was authorized to represent the Association at the AMA Conference on Disaster Medical Care, to be held in Chicago on November 2 and 3.

There being no further business the committee adjourned to meet again at 10:00 a.m., Monday, October 14, 1963, in the Fairbanks Room, Columbia Club, Indianapolis.



This summary of what is happening in Washington is prepared by A.M.A.'s Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D.C. -- The federal government has, in effect, branded the so-called cancer drug krebiozen as worthless.

Boisfeuillet Jones, special assistant to the secretary of Health, Education and Welfare, said in a letter to Dr. Steven Durovic, sponsor of the controversial substance, that a "scientifically unimpeachable" Food and Drug Administration analysis of krebiozen "casts strong suspicion" on claims for it as a cancer treatment.

The FDA announced September 7 that it had analyzed a sample of krebiozen powder furnished by Durovic and found it to be creatine, a substance naturally present in the human body and considered worthless in treatment of cancer.

In a September 11 letter to the FDA, Durovic challenged the analysis. He said studies made for him by "two reputable independent laboratories" disagreed with five of the FDA findings.

Replying to the Durovic letter, Jones said the FDA analysis was "scientifically unimpeachable." He also placed full responsibility on Durovic and Dr. Andrew C. Ivy, his chief backer, for any consequences of withdrawing the drug from patients who have taken it.

"We are fully sympathetic with those patients who believe that krebiozen is necessary for the maintenance of health and life," Jones wrote. "You and Dr. Ivy have encouraged their belief; you made krebiozen available to them with claims of benefit. . . . The full moral responsibility for the consequences is yours. . . .

"Tests made by the FDA demonstrate that creatine is only slightly soluble in mineral oil and that the creatine which you provided and called krebiozen is soluble to exactly the same extent."

FINANCIAL AID GRANTED MEDICAL SCHOOLS, STUDENTS

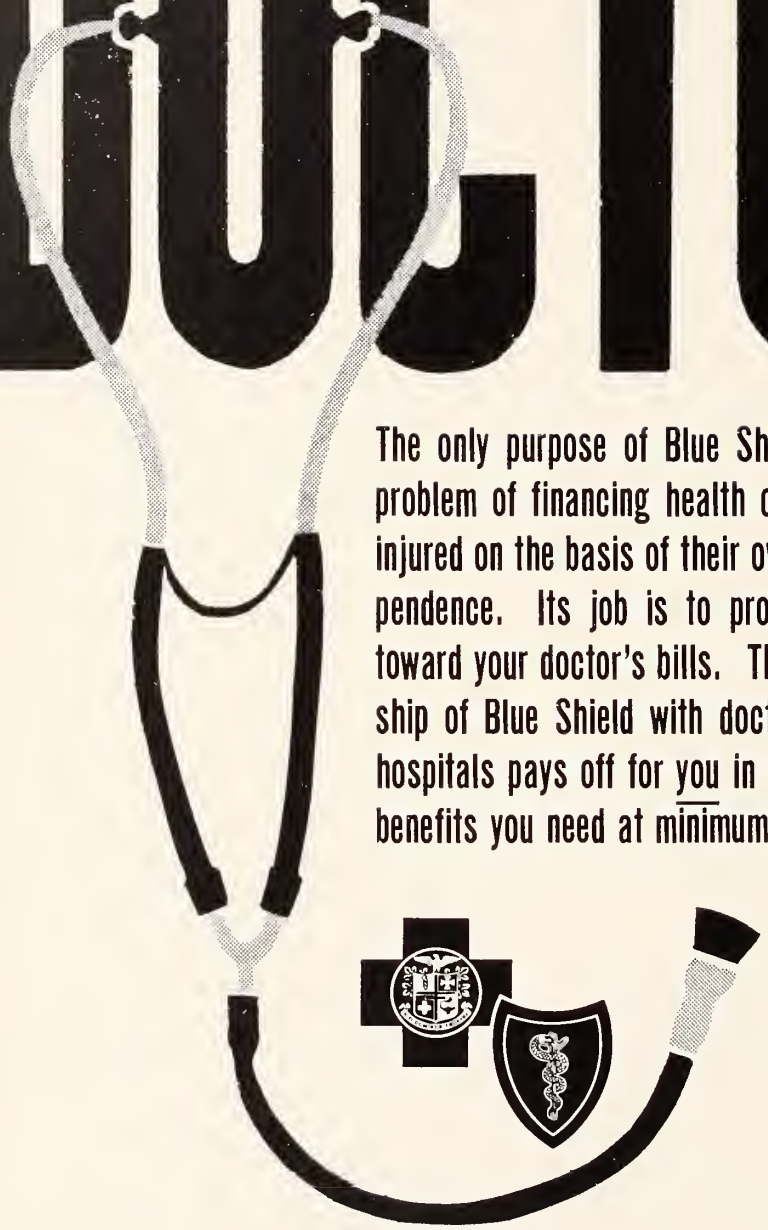
The federal government has a new $235 million program that will provide financial aid for construction of medical schools and loans to medical students.

The Senate in mid-September passed by a vote of 71 to 9 the Administration's medical education bill in the identical form that the House had approved it earlier. President Kennedy promptly signed it into law.

Before approving the bill, the Senate rejected by a 43 to 39 vote an

Continued

DOCTOR



The only purpose of Blue Shield is to help solve the problem of financing health care for the sick and the injured on the basis of their own self-reliance and independence. Its job is to provide realistic allowances toward your doctor's bills. The close working relationship of Blue Shield with doctors and Blue Cross with hospitals pays off for you in terms of the personalized benefits you need at minimum fees.

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(One of a series of ads being used in key Hoosier newspapers)

amendment that would have forgiven part of the loan to a student if, after graduation, he practiced in an area where there was a shortage of doctors. The Senate also voted down, 63 to 18, a proposal that would have knocked out loans to students.

The bill authorizes a three-year, $175 million matching grant program for the construction, replacement, or rehabilitation of accredited public or nonprofit teaching facilities for the training of physicians, dentists, pharmacists, optometrists, podiatrists, nurses, or professional public health personnel. A grant can not exceed 66 and 2/3% of the cost of construction for new schools or new facilities at existing schools.

The new law authorizes a loan program, patterned after the National Defense Education Act, for full-time students in schools of medicine, dentistry or osteopathy.

Loans can not exceed $2,000 for a student in any academic year. Schools will be required to give preference to first-year students in the school year 1963-64. Loans will be repayable over a ten-year period which would begin three years after the student ceases to pursue a full-time course of study.

The unpaid balance of a loan will bear 3% interest per annum or the going Federal rate for obligations having a 15 year or more maturity, whichever is higher. Loans will be made without security or endorsement, except in the case of a minor where the note would not create a binding obligation.

FALLOUT SHELTER PROGRAM DENIED FUNDS

A $175 million nuclear fallout shelter program has been dealt a stunning blow by the House Appropriations Committee.

The committee denied most of the funds sought by the Defense Department for the shelters and brought an expression of concern from Speaker McCormack, who called the program a "Fourth arm of our national defense."

The House had approved a bill authorizing the money for a one-year program of federal aid for construction of new shelter spaces in non-profit private and public institutions such as schools and hospitals.

The committee's action denied all of the $175 million sought for new shelter construction, including additional funds for building shelter spaces in federal buildings. It allowed only $7.8 million to continue locating and marking shelter spaces in existing private and public buildings.

FDA ENOVID WARNING A MISTAKE

The Food and Drug Administration has discovered that its August warning against the use of the birth-control pill Enovid by women over 35 was a mistake.

In releasing the final report on the oral contraceptive by an advisory committee of medical experts appointed to study the relationship between consumption of the drug and the occurrence of certain circulatory disorders, principally thrombophlebitis and pulmonary embolism, the FDA said:

"The preliminary report of the committee released on August 4 suggested that there was a statistically significant increase in risk in women 35 years

of age or over who were taking Enovid. Further statistical evaluation by the committee has indicated that a higher rate of fatalities due to thromboembolism observed in Enovid users 35 years of age or over is not statistically significant.

"The manufacturer of the drug (G. D. Searle & Co.) is being advised that references in labeling, which FDA requested last month, may be modified to state that the higher rate of fatalities is not statistically significant. The labeling will continue to advise physicians of the principal contraindications for use of Enovid as a contraceptive, namely: certain cancers, pre-existing liver dysfunction or disease, and a history of thrombophlebitis or pulmonary embolism." ◄

Paper, Paper, Everywhere!

Almost daily an avalanche of fourth class mail is heaped upon our desk, leaving scant room for our feet as we lean back in our comfortable "slippy disky" chair. A cursory perusal of this enchanting pile of dubious delight discloses, aside from the medical literature, a plethora of overtures from merchants seeking to do commerce with us, their wares running the gamut from silks of Samarkand to stock in Canadian gold mines. Therefore, one cannot be blamed for harboring the suspicion that one's name perhaps graces a "sucker mailing list."

The problem posed by this daily Niagara of junk-mail is its disposal, with perhaps several choices open. For example, one might save a week's accumulation and have it baled, but the economic factors of profit and loss precludes this quaint commercial venture. The paper-baler's wages absorb all the profit. Another choice would be to throw all of this treasure into a spare room, and when it became completely full—Move! (providing one is not trammeled by a long lease). Again, one might get a smaller desk, rationalizing that a small desk begets a small pile. (Like the current logic of 40 hrs. pay for 32 hrs. work—it ain't logical.)

One of our colleagues tells of an interesting solution; one, no doubt, that suits his uninhibited temperament and provides a new dimension for merriment. He carefully opens all this junk-mail and carefully interchanges their contents among them via the enclosed self-addressed business envelopes and swifter than the arrow from a Tartar's bow, he mails them back; this is somewhat analagous to a football referee signaling that the penalty of each team nullify the other. His claim for this system is twofold: he hoists these pests by their own petards, and helps reduce the postoffice department's deficit.

If you can't beat them, join them! I'm presently getting literature on how to win a high-school diploma by a correspondence course.—Franklin F. Premuda, M.D., reprinted from *The Lake County Medical News*, December, 1962.



LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentotion of opinions which oppear on the editoriol poges of the public press, ond which ore of interest to the medicol profession. Its function is to review comments which moy be fovorable or unfovoroble to medicine. Members ore invited to submit editoriol clippings for this column.

People Make Progress

A British government white paper on "Aid To Developing Countries" reminds us that what is now the United States was once—just a few centuries ago—a developing country into which British developmental capital was being injected.

The first colonists of the New World came to a land about as backward and undeveloped as will be found anywhere on earth today. The native populations were generally content with subsistence living, had none but the crudest industry and not much better agriculture, and were often nomadic. Evidence was later found that more highly developed civilizations had existed in some isolated areas, but they had failed to carry development forward sufficiently to survive.

By comparison with European and Oriental development of those times, America was wild and raw.

Provisions of our Constitution point up something else about the then developing country. This is that the first century or so of American development gave the leaders of the infant nation no reason to foresee that certain regions of the country were destined for widely disparate levels of development.

The Constitution originally provided for uniform rates of taxation, duties, imports and exports throughout the country. In various ways it provided that there be no economic discriminations among the states. These provisions reflected an assumption that the economic conditions and expectations of the various parts of the country were similar. They started on an equal footing, and the founding fathers apparently supposed that they would remain so.

What made development in this new land outstrip Europe's own development? What made such differences within the country that today some sections of the country are habitually described as impoverished and in need of the help of the rest of the country?

Unquestionably some credit must be given to the economic assistance which in the early developing years flowed from Europe, largely from Great Britain, to America. But this flow of aid was relatively short-lived and the developing colonies quickly became not only self-supporting but profitable as overseas investments. We think it was not the aid which made the difference.

It was the people. They were industrious, energetic, imaginative and venturesome. They came from a background of developmental progress. These qualities, put to work, converted America from an almost untouched wilderness to an industrial and economic giant.

What about the differences in development within America? Again we think the explanation lies in the people. The opportunities and resources were similar. It is not that the peoples of various parts of the new country were basically different, but as development moved along they made different decisions. The South rested its development on the unsound base of slave labor. Among other effects this decision and its aftermath delayed the South's turn from agriculture to industry far beyond the time when it should have been made. In other areas and other times, the people have doomed a community or a section to back-

Continued on page 1394

RECOGNIZE THIS PATIENT?



"I don't sleep well . . . I dream a lot . . . wake up tired and irritable. I don't have any appetite . . . I'll never be cured."

When you recognize signs of depression and anxiety and associate them with an organic condition—add 'Deprol' to your therapy.

Typical conditions in which 'Deprol' should be considered for control of the associated depression and anxiety:

Cancer ■ Cardiovascular disorders ■ Arthritis ■ Menopause ■ Alcoholism ■ Obesity ■ Asthma, hay fever and related allergies ■ Chronic infectious diseases ■ Pregnancy and post partum ■ Dermatoses ■ G.I. disorders, and many other organic disturbances.

When you recognize depression and anxiety traceable to an emotionally charged situation with no somatic disorder—start the patient on 'Deprol'.

Typical situations in which 'Deprol' is indicated:

Fear of cancer or other life-threatening disease ■ Pre- and post-operative fears ■ Marital problems ■ Death of a loved one ■ Loss of work ■ Retirement problems ■ Financial worries, and many other stressful situations.

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meprobamate 400 mg. + benactyzine hydrochloride 1 mg.

BRIEF SUMMARY: *Indications:* Depression, especially when accompanied by anxiety, tension, agitation, rumination or insomnia. *Side Effects:* Slight drowsiness and, rarely, allergic reactions, due to meprobamate, and occasional dizziness or feeling of depersonalization in higher dosage, due to benactyzine, may occur. Meprobamate may increase effects of excessive alcohol. Use with care in patients with suicidal tendencies. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction. Withdraw gradually after prolonged use at high dosage. *Complete product information available to physicians on request.*

USUAL ADULT DOSAGE: 1 tablet q.i.d. May be increased gradually, as needed, to 3 tablets q.i.d.; with establishment of relief, may be reduced gradually to maintenance levels.

SUPPLIED: Light-pink, scored tablets. Bottles of 50.

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FOURTH ESTATE

Continued from page 1391

wardness and depression by clinging to old livelihoods and old ways of life which were left behind in the advancing development of the rest of the country.

Pouring assistance into depressed areas will not help much if the basic need is for reinvigoration of the people.

That is true for parts of this nation and it is true for parts of the world.—*Indianapolis Star*, Sept. 26, 1963. ◄

About Our Cover



At the start of the Pilgrim Fathers voyage to America two ships, the Speedwell and the Mayflower, set sail from Rotherhithe, London on August 5, 1620. But Speedwell proved unseaworthy, reporting bad leaks almost immediately; the ships therefore put into Dartmouth and some of the leaks were repaired. But again Speedwell reported trouble and once more the ships were forced to put into harbor, this time at Plymouth on the southwest coast of England. Here it was declared that Speedwell was "generally weak" and her voyage was canceled.

The Mayflower could carry only a part of Speedwell's passengers. However this worked in favor of the Pilgrims as many of those left behind were only too happy to remain since they considered the Speedwell's troubles ill omens and were badly frightened. The stronger and braver souls therefore were the ones that transferred to the Mayflower.

The Mayflower sailed from Plymouth on September 6, 1620. Her 66 day voyage was an excellent record for such an overcrowded ship. Some attribute the low death rate on the voyage to "antiseptic" waters in the ship's bilges, "sweetened" by her previous career as a wine carrier! Be that as it may, only one sailor died on the voyage. The number of Pilgrims remained unchanged, for though a young servant of Samuel Fuller died at sea, a son, Peregrine, was born to Mr. and Mrs. William White during the crossing.

The first landfall was made on November 9, when the lookout sighted the Cape Cod Highlands, but dangerous shoals and roaring breakers made landing impossible.

A scouting party finally landed at Provincetown and for a month they explored the countryside finding no site they considered suitable to their needs. On December 11, the explorers landed at Plymouth and were delighted by "divers cornfields and little running brooks." The location was, in addition, defensible, commanding a good view of the surrounding countryside and the bay, and convenient for fishing.

Thus it was that the Mayflower dropped anchor at Plymouth, Massachusetts, December 16, 1620.

The Mayflower remained at Plymouth for five more months while the Pilgrims set about building houses. During this time an epidemic struck Plimoth Plantation and by the time it had run its course, half the voyagers had been buried. Only three married couples escaped a death, only five out of 18 wives survived, over half the heads of households perished—but the very young survived.

The famous first Thanksgiving in 1621 was really a harvest festival, a gathering of friends and neighbors. Those present having fully recovered their health and strength met together to give thanks for their harvest.

An eyewitness account of that Thanksgiving is contained in a letter of Edward Winslow to a friend in England:

> "Our harvest being gotten in, our Governor sent four men on fowling, that so we might after a more social manner rejoice together, after we had gathered the fruit of our labors. They four in one day killed as much fowl as, with a little help beside, served the Company almost a week.
>
> "At which time, amongst other recreations, we exercised our arms, many of the Indians coming amongst us, and amongst the rest their greatest king, Massasoit with some 90 men, whom for three days we entertained and feasted. And they went out and killed five deer which they brought to the plantation and bestowed on our Governor and upon the Captain and others."

The ship shown on our cover is the Mayflower II, a replica of the original Mayflower which returned to her home port of Rotherhithe where she was broken up. The picture of Mayflower II was made available to *The Journal* through the kindness of Plimoth Plantation, Plymouth, Massachusetts.—M.E.R.

The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 56 — November 1963 — Number 11

Photometric One-Stage Prothrombin Determination Utilizing the Analytrol And A Constant Temperature Block

ROY SPECK, M.T. (ASCP)
JAMES J. SULLIVAN, M.D.
*Indianapolis**

CAWLEY AND EBERHARDT[1] recently reported a modification of the one-stage prothrombin time procedure using the Analytrol and a special copper tube adapter. When we attempted to duplicate their results, an optimum temperature of 37°C. was not obtainable. This might be explained, in part, on the basis of variation in ambient temperatures of various instruments. Variations in room temperature seemed to exert even more influence upon the temperature of the copper adapter. Temperatures as low as 29°C. were encountered in our laboratory with the copper tube assembly of Cawley and Eberhardt.

An aluminum block heated by circulating water from a 37°C. water bath was obtained in order to correct for temperature variation. When the water was circulated at a rate which compensated for the heat loss due to radiation from the block, it was possible to maintain the temperature in the block at 37°C. ± 0.1°. This regulation was found to be independent of room temperature and the ambient temperature of the Analytrol.

* From the Department of Pathology, St. Vincent's Hospital, Indianapolis.

By using 0.1 molar sodium citrate[3] in this procedure, elaborate precautions, such as icing in order to preserve proaccelerin, became unnecessary. Possible objections to 0.1 molar sodium oxalate were avoided, namely, interference from precipitated calcium oxalate,[6] especially in the short prothrombin time ranges (Figure 1, A and B), and the absorption of coagulation factors on the surface of the precipitated calcium oxalate.[5]

Materials and Methods

I. Reagents and Materials

1. Diagnostic Plasma, Warner-Chilcott.
2. Thromboplastin-Calcium (Simplastin) Warner-Chilcott.
3. 0.1 Molar Sodium Oxalate (Vacutainer Tube, 3206 NAX).
4. 0.1 Molar Sodium Citrate (Vacutainer Tube, 3206 X Formula 54).
5. Model RB Analytrol with B-5 Cam, Spinco.
6. Test Tube Holder for Analytrol, Spinco No. 300-524.[1] (Analytrol Method B)
7. Copper Tube Fitting for Test Tube Holder.[1] (Analytrol Method B)

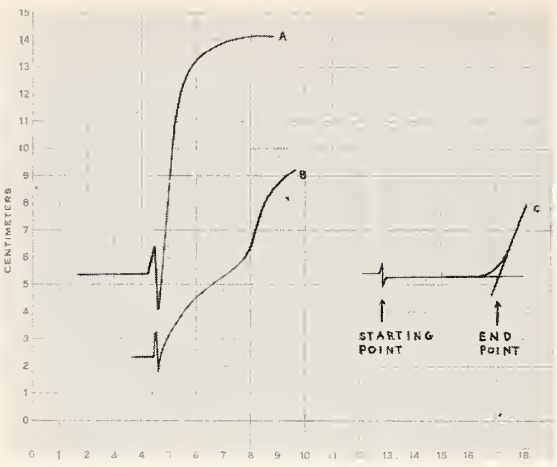


FIGURE 1

LINE A is nine parts serum-saline (3:2) and 1 part 0.1 M. sodium oxalate substituted for plasma. Represents precipitation zone due to calcium oxalate. Line B is the test performed with sodium oxalate as anticoagulant. Line C is test performed with sodium citrate as anticoagulant.

8. Aluminum Block* (Analytrol Method A)
9. Vertical Circulating Pump.
10. Serological Water Bath.
11. Test Tubes, Glass, 10 mm. x 75 mm.
12. Test Tubes, Polystyrene, 12 mm. x 75 mm., Falcon.

II. Collection of Blood

1. Venous blood was obtained using vacutainer technic. (Both citrate and oxalate were used as anticoagulants initially.)
2. The blood was centrifuged at 1,500 r.p.m. for 10 minutes and the supernatant plasma transferred to a 10 mm. x 75 mm. glass test tube.
3. One-stage prothrombin determinations were performed on all plasma specimens within two hours of collection.

III. Manual Method

The method of Quick[4] was used, except that a commercial thromboplastin and control were employed.

IV. Analytrol Method A

1. An aluminum block was plugged into the Analytrol and the photocell into the block. The proper connections from the block to the water bath and circulating pump were made (Figure 2). The circulating pump was turned on and the water was allowed to circulate through the aluminum block. The temperature was adjusted to 37°C. Both water bath and aluminum block were checked for correct temperature. Once the temperature adjustment was made, there was rarely any need for further adjustment.
2. The power and light switches of the Analytrol were turned on and the instrument allowed to warm up for at least 15 minutes. The Analytrol recording pen was inked and adjusted to the "O" line on Analytrol chart paper by means of the rear slit width control. Although the front slit width was not found to be critical, it was customary to use a slit width of 1.5 mm.
3. For each test plasma two polystyrene tubes containing 0.4 ml. thromboplastin-calcium mixture were placed in the 37°C. water bath. The test plasmas were placed into the water bath and a one ml. (T.C.) serological pipette was inserted into each. Three minutes were allowed for warming to 37°C. The thromboplastin tubes and test plasmas were not allowed to remain in the water bath longer than 30 minutes.
4. A thromboplastin tube was placed in the aluminum block well and the pen adjusted to the 5 cm. line with the potentiometer located on the back of

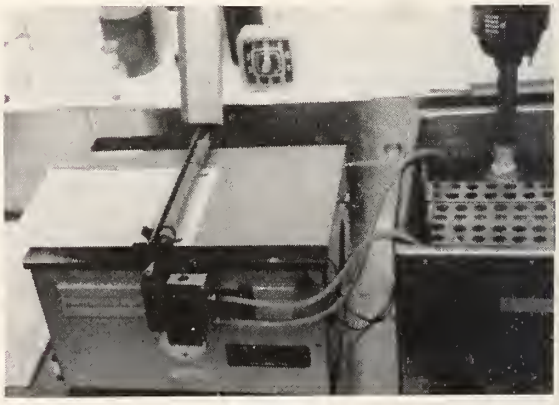


FIGURE 2

COMPLETE assembly used in Analytrol Method A.

* For construction details write Arthur P. Kebel, M.D., 3507 North Grant St., Indianapolis.

the Analytrol. The drive switch was turned on and after the chart paper had moved a short distance, 0.2 ml. test plasma was blown directly into the thromboplastin. This produced a sharp peak which was designated as the starting point.

5. When coagulation occurred, there was a rapid rise in the pen due to the increase in optical density. The chart paper was removed and lines drawn coinciding with the base line and the linear portion of the ascending curve produced by coagulation. The point of intersection of these two lines was designated as the end-point (Figure 1, C).
6. Since the chart drive had a constant speed of 10 cm./min., the distance in millimeters between the starting point and the end-point multiplied by 0.6 gave the elapsed time in seconds.
7. A duplicate determination was made and both results were referred to a standard curve prepared from pooled normal plasma with normal saline as a diluent. The final result was recorded in seconds and percentages.

V. Analytrol Method B

1. The copper tube was inserted into the test tube holder. This assembly was substituted for the aluminum block used in Method A. Otherwise, the procedure was identical with Analytrol Method A.

Comparison of Analytrol Methods A and B

One-stage prothrombin time determinations were performed in duplicate on the plasmas of ten patients undergoing anticoagulant therapy, using both Analytrol methods (Table I). 0.1 molar sodium citrate was used as anticoagulant in the tests. It is apparent that the mean of the values obtained by Analytrol Method B exceeded the mean of Analytrol Method A by 5.1 seconds. Since the only variable between the two procedures was temperature regulation, it was concluded that this was the cause of the variation in the results.

In order to determine the magnitude of the variation in temperature with respect to time between the aluminum block and the copper tube adapter, the following simple experiment was performed: 0.4 ml. thromboplastin and 0.2 ml. serum were placed in a polystyrene test tube. The tube was placed in the 37°C. water bath and a centigrade thermometer inserted. When the temperature in the tube had attained 37°C., the tube was removed to the aluminum block and the temperature recorded at 10 second intervals, for 30 seconds (Table II). The same procedure was repeated with the copper tube assembly. Analytrol Method A, therefore, gives excellent temperature regulation, whereas, Analytrol Method B does not.

COMPARISON OF ANALYTROL METHODS A AND B

No.	Analytrol Method A		Average	Analytrol Method B		Average
1.	13.5	13.5	13.5	14.7	16.2	15.4
2.	21.6	22.2	21.9	24.3	24.0	24.3
3.	19.2	18.6	18.9	26.4	24.6	25.5
4.	15.3	15.3	15.3	17.1	18.3	17.7
5.	15.6	15.6	15.6	19.2	18.6	18.9
6.	14.4	14.4	14.4	15.6	16.8	16.2
7.	12.6	12.6	12.6	22.2	18.0	20.1
8.	17.4	18.0	17.7	30.0	31.2	30.6
9.	32.4	33.0	32.7	40.8	37.8	39.3
10.	27.6	27.6	27.6	32.4	33.6	33.0
Mean			19.0			24.1

TABLE I

COMPARISON OF ALUMINUM BLOCK AND COPPER TUBE ASSEMBLY
IN RESPECT TO RATE OF TEMPERATURE CHANGE

Seconds	Aluminum Block	Copper Tube	Seconds	Aluminum Block	Copper Tube
0	37.0°C.	37.0°C.	20	37.0°C.	35.0°C.
10	37.0°C.	36.0°C.	30	37.0°C.	33.8°C.

TABLE II

Comparison of Analytrol Method A with the Manual Method

A series of 50 prothrombin time determinations was run in duplicate on patients undergoing anticoagulant therapy, using both the manual method and Analytrol Method A. The manual method was performed by a technician with years of experience with the procedure. The Analytrol Method A was performed by a student technician with only 10 minutes instruction.

The values for the Analytrol method ranged from 9.6 seconds to 23.4 seconds. Values for the manual method ranged from 14.0 seconds to 35 seconds. A scattergram was prepared in terms of the actual prothrombin times obtained, in order to compare the two procedures (Figure 3). The Analytrol method invariably gave results that were shorter than those obtained by the manual method. This probably reflected the difference in the two types of end-points utilized.

In fact, as the prothrombin times become more prolonged, the interval between the photometric end-point and the visual end-point become greater. If however, a scattergram is made comparing the prothrombin times in terms of percent, the correlation is quite good (Figure 4).

The reproducibility of the Analytrol method is excellent. The standard deviation[2] was calculated to be 0.24 second (Table III). The normal range for this method is 9.7 ± 1.0 seconds.

Although certain theoretical objections to the one-stage prothrombin time determination are not overcome by this procedure, several technical advantages are at once apparent.

The photometric end-point and automatic timing practically eliminates the observational bias inherent with the manual method, and therefore one technician can easily reproduce the results obtained by another. Constant temperature and minimal agitation, both of which are well known to be important considerations in the coagulation reaction, insure better standardized conditions for the one-stage prothrombin time test.

The production of a permanent record

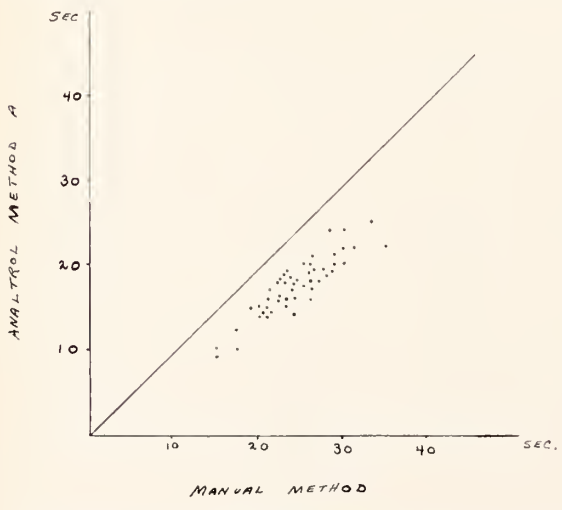


FIGURE 3

SCATTERGRAM comparing Analytrol Method A with manual method in terms of time.

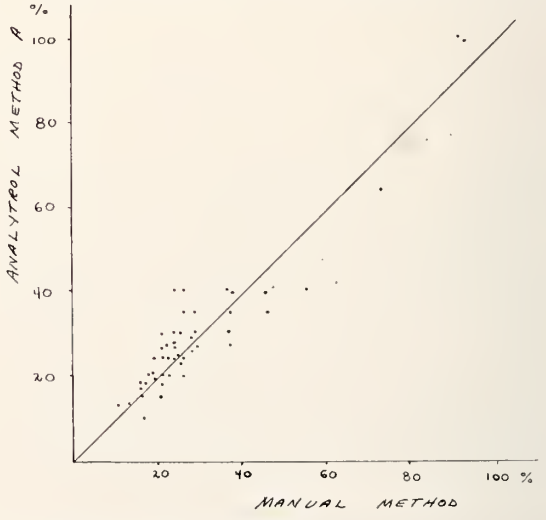


FIGURE 4

SCATTERGRAM comparing Analytrol Method A with manual method in terms of percent.

50 DUPLICATE DETERMINATIONS USING ANALYTROL METHOD A. "D" IS DIFFERENCE BETWEEN PAIRS AND SIGMA IS 0.24 SECOND

Number	Prothrombin Time		d	d^2	Number	Prothrombin Time		d	d^2
1.	22.5	22.8	0.3	0.09	26.	15.6	16.5	0.9	0.81
2.	15.6	15.9	0.3	0.09	27.	20.1	20.4	0.3	0.09
3.	19.2	19.2	0	0.09	28.	19.8	19.8	0	0
4.	14.4	15.0	0.6	0.36	29.	23.1	23.4	0.3	0.09
5.	15.3	15.6	0.3	0.09	30.	21.0	20.7	0.3	0.09
6.	9.6	9.6	0	0	31.	17.4	18.0	0.6	0.36
7.	17.4	17.7	0.3	0.09	32.	18.0	18.3	0.3	0.09
8.	18.6	18.6	0	0	33.	13.8	13.8	0	0
9.	16.5	16.8	0.3	0.09	34.	9.6	9.6	0	0
10.	22.2	22.5	0.3	0.09	35.	26.1	26.7	0.6	0.36
11.	17.4	18.0	0.6	0.36	36.	11.1	11.4	0.3	0.09
12.	21.3	21.9	0.6	0.36	37.	15.0	15.3	0.3	0.09
13.	18.9	19.2	0.3	0.09	38.	15.6	15.6	0	0
14.	15.0	15.0	0	0	39.	18.9	19.2	0.3	0.09
15.	18.9	19.2	0.3	0.09	40.	19.8	19.8	0	0
16.	9.6	9.6	0	0	41.	18.6	18.6	0	0
17.	14.4	14.4	0	0	42.	18.0	18.0	0	0
18.	16.8	16.8	0	0	43.	15.6	15.6	0	0
19.	14.4	14.7	0.3	0.09	44.	21.0	21.3	0.3	0.09
20.	16.2	16.5	0.3	0.09	45.	14.4	14.7	0.3	0.09
21.	16.2	16.2	0	0	46.	18.6	18.6	0	0
22.	16.5	16.8	0.3	0.09	47.	8.7	9.0	0.3	0.09
23.	17.2	18.1	0.9	0.81	48.	10.8	10.8	0	0
24.	15.0	15.0	0	0	49.	19.8	19.8	0	0
25.	17.4	17.7	0.3	0.09	50.	15.9	16.2	0.3	0.09

TABLE III

makes it possible for the technical staff to review the actual test. It is also possible to chart this permanent record. An advantage not to be ignored is the ease with which a technician becomes proficient in the performance of this procedure with a minimum of instruction.

Summary

A modification of the one-stage prothrombin time has been presented utilizing the Analytrol with a constant temperature block. The prothrombin times are shorter than most procedures in use at the present time, since a photometric end-point is used.[6] The chief advantages of this procedure are constant temperature, minimal agitation, automatic timing, non-visual end-point and permanent record.

The partial thromboplastin time and thromboplastin generation time have been adapted to this instrument and no obstacle can be foreseen that would prevent extension to other coagulation tests in which plasma is used.

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Acute Adrenal Hemorrhage in the Adult

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THE RECOGNITION of chronic adrenal insufficiency (Addison's disease) has occupied the medical literature for many years. Physicians have been alert to the diagnosis of Waterhouse-Friderichsen syndrome in meningococcal infections, especially in children. Only in the last 15 years have observers been writing with any frequency about acute adrenal insufficiency as a result of adrenal hemorrhage.

Obstetricians and pediatricians have been well aware of this condition and much of the medical literature has been written about cases of newborn infants and women in the puerperium, who have died of acute adrenal insufficiency resulting from adrenal hemorrhage. Internists and surgeons have recently become more interested in this condition of so-called spontaneous adrenal hemorrhage. This article is written to stir interest again in this disorder of acute adrenal insufficiency which can be diagnosed ante-mortem and treated successfully. The diagnosis is difficult and must be made by almost empirical means.

Case Report

The following case illustrates this problem as a complication of an acute surgical disease in a patient with duodenal ulcer and pulmonary emphysema.

The patient was a 69-year-old white retired male who was admitted to Welborn Memorial Baptist Hospital about 4:00 p.m. on December 21, 1958, with a chief complaint of abdominal pain. At 1:00 a.m. on the day of admission the patient had had the abrupt onset of severe abdominal pain. In the week prior to admission, the patient had had much lower abdominal gas and bloating. The acute abdominal pain seemed to begin in the lower abdomen and extended up to the epigastrium and substernal area. He stated he had had "gas and bloating" for the past three years; however, the family stated that the patient had complained of gas, bloating and indigestion for 15 years. He had lost weight in the last five years. There had been no melena, hematemesis or jaundice.

This man had a long history of chronic cough, wheezing and mild to severe dyspnea.

Past history revealed a right herniorrhaphy in 1930 with recurrence, and pneumonia in 1943. The family history was not revealing.

Physical examination revealed an acutely ill, elderly male who appeared in fair general health. Temperature was 97.8°, head and neck not unusual. Eyes, ears, nose and throat—he had full dentures. Funduscopic examination showed A:V ratio 1-3 with slight silvering. No hemorrhages or exudates and no edema of the disk. Chest—bases were low, breath sounds were somewhat diminished. Occasional rales were heard which cleared promptly with coughing and there was a buzz at the open mouth.

The heart size was difficult to evaluate because of increased tympany of the chest. It was apparently not enlarged. No murmur, rub or gallop was heard. Blood pressure was 110/80. The abdomen revealed tenderness over its entirety, particularly in the epigastrium. There was tympany with rare bowel sounds and a very small umbilical hernia, about ½ mm. in diameter which was easily reduced. A recurrent hernia near the scar in the right groin was also easily reduced. Some rigidity and rebound was noted everywhere. Rectal—stool brown in color, prostate normal, and the rectal mucosa was smooth. Bones and joints—negative. Reflexes were equal and active.

X-rays of the abdomen on admission in the supine and upright position showed collections of gas in the small bowel suggestive of ileus. The chest x-ray showed evidence of advanced fibrotic change at the right lung

base. Hemoglobin was 13.8 grams %, hematocrit was 42% and initial white blood count was 14,500 with 90% PMN and 10% lymphocytes. The urine analysis after dextrose intravenous showed 3+ glycosuria, otherwise not abnormal.

The patient's condition remained about the same the first 24 hours. Levine tube with suction was instituted on admission and intravenous fluids were given to replace fluid losses. The temperature rose to 101° the day of admission but fell to 99.8° rising to 100.4° the second day. The additional tenderness was generalized and mild until about the end of the second day when it became more localized in the upper abdomen. No true rigidity was noted at any time and the ileus remained unchanged. Right upper quadrant resistance, dullness, and the sensation of a mass was noted on the third hospital day. Intravenous cholangiograms showed vague visualization of the biliary ducts but the gallbladder was not visualized.

Surgery was performed on the third hospital day and a ruptured duodenal ulcer was found and closed.

The patient's condition postoperatively remained poor but showed some evidence of improvement with reduction in the abdominal distention. He was supported with intravenous fluids. Serum electrolytes remained relatively normal. He began to pass flatus on the second postoperative day but nausea persisted for three days.

The blood pressure remained low but not at shock levels until the third postoperative day when peripheral vascular collapse developed. An increase in parenteral fluid intake and 500 cc.'s of whole blood was started, yet the response was poor even with norepinephrine. Hydrocortisone 100 mgm. a day was then started.

The temperature returned to 99.6° on the first and second day. On the third day, with cessation of steroids, the temperature began to rise to a high of 103°. On the fifth day, with the re-institution of intravenous hydrocortisone, the temperature fell to normal in 24 hours.

On the sixth day the blood pressure and temperature were normal and steroid medication was again discontinued. On the eighth postoperative day the temperature again became elevated and blood pressure fell within 24 hours. During the postoperative course the patient received Chloramphenicol 200 mgm. intravenously or intramuscularly every six hours. On the tenth postoperative day, the patient expired in shock. Steroid medication had not been continued or re-instituted after the sixth day.

Culture of the abdominal fluid and blood were negative at time of surgery.

Autopsy examination revealed massive bilateral hemorrhage into the adrenal glands, especially the cortex. Other diagnoses included far advanced pulmonary emphysema, ulcerative esophagitis, residuals of closure of a perforated duodenal ulcer and edema and marked inflammatory reaction of the small bowel.

The delay in closure of the ulcer was the result of concern for the possibility of a mesenteric thrombosis. This additional stress undoubtedly resulted in the adrenal gland pathology.

This patient in retrospect showed many of the cardinal signs and symptoms of adrenal apoplexy which was properly treated by accident and by the same token he died because of cessation of therapy.

Fourth Postoperative Day	*Fifth Postoperative Day*	*Sixth Postoperative Day*	*Seventh Postoperative Day*	*Eighth Postoperative Day*	*Tenth Postoperative Day*
CO_2 - 22 meq.	CO_2 - 11	CO_2 - 12	CO_2 - 29 meq.	CO_2 - 30	CO_2 - 34
C^1 - 108 meq.	C^1 - 108	C^1 - 100	C^1 - 92 meq.	C^1 - 106	C^1 - 92
K - 6.8 meq.	K - 5.8	K - 5.2	K - 4.7 meq.	K - 5.0	K - 5.8
Na - 144 meq.	Na - 138	Na - 138	Na - 142 meq.	Na - 148	Na - 152
	NPN - 136	NPN-138	NPN - 92	NPN - 68	NPN - 70

Discussion of Pathology

This discussion is limited to that form of adrenal insufficiency caused by acute adrenal hemorrhage of a non-septicemic nature and not from direct trauma. The pathologic process behind this type of insufficiency is vascular. Primary diseases which may cause hemorrhage into the adrenal gland according to Reynolds[1] are as follows —(a) hemorrhagic disorders, (b) venous or arterial thrombosis, (c) bacterial embolism, (d) destruction of capillary walls by toxins, (e) direct physical trauma, and (f) replacement of the gland by neoplastic tissue with or without hemorrhage.

One is well aware of the pathophysiologic processes associated with most of these except for the basic etiology behind the arterial or venous thrombi. With many of the reported cases stress was a common factor. Rich, as quoted by Green,[2] suggested that the apoplexy was a sequel of degenerative changes in the cortex as a result of stress. He felt the hemorrhage was simply a terminal event.

A similar statement by Peterson and Goldzieher[3] reported that "once an organism has become adapted to one stress it decreases its ability to react and adapt itself to a superimposed stress. This may lead to the acute adrenal insufficiency and exhaustion reaction of Seyle, which histologically is often characterized by hemorrhage and necrosis of the adrenal cortex."

In the same relationship to this etiologic factor was a theory set forth in 1947 by the British writer, MacMillan[4] who suggested that the cells of the gland are part of the supporting structure for the small blood vessels. There is very little fibrous connective tissue, therefore the support of the gland is lost when atrophy occurs and the capillaries may rupture. Many of the cases which have no specific etiologic factor other than stress must have some such pathologic process.

Of course patients with hypertension or arteriosclerosis due to age may very well have rupture or thrombosis on the basis of the arteriosclerosis alone. Leone, as quoted by MacMillan,[4] felt that in those patients without an arteriosclerotic basis, the thrombi were a manifestation of the disruption of the circulation instead of a primary cause. One must also keep in mind that many intra-abdominal diseases have thrombosis as a complication. This may be the entire pathology in many of the spontaneous adrenal vein thromboses.

The peculiar circulatory anatomy of the suprarenal gland makes it vulnerable to vascular accidents. Usually there are at least three arteries entering the capsule, but there may be as many as 50. These immediately break up into capillaries and sinusoids. Yet, it has only one vein for drainage. More cases of unilateral gland involvement have the right adrenal affected.

Levene[5] reported four cases of trauma, of which three had no apparent gross localized trauma of the adrenal gland. All patients had head trauma; this made him feel there was an association between head trauma and adrenal hemorrhage. It is felt this could well be explained by the stress theory.

Review of Type of Cases

No tabulation as to a complete review of all cases to date is attempted here, as Berte[6] did in 1953. There are some generalizations of types of cases in which one's suspicions should be aroused. As mentioned earlier, the pediatric literature has reported a number of cases of acute adrenal insufficiency on the basis of hemorrhage.[7, 8] The trauma of difficult delivery and prematurity were the greatest causative factors. In almost all those cases reported to be associated with pregnancy either a difficult, long or a pathologic delivery was evident.[3, 9, 10]

Another important and rather frequently mentioned disease was that of hypertension[1, 2, 4] Other diseases mentioned were meloproliferative disorder,[11] ulcerative colitis,[12] chronic pancreatitis, uremia, burns, sepsis, hemorrhagic diseases, neoplasms. It has also been reported following electronarcosis.[13] One case was found in a 72-year-old man without hypertension or other disease. Hurxthal[15] suggests this surgical complication should be watched for in the following types of patients with lowered adrenal reserve:

(a) Pituitary tumors (especially chro-

mophalic adenomas and craniopharyngiomas).

(b) Hypopituitarism without tumor.

(c) Addison's disease (idiopathic and tuberculous).

(d) Hypophysectomized patients or those with pituitary irradiation.

(e) Those patients on steroid therapy who have adrenal atrophy.[16]

(f) Adrenalectomized patients (partial or total).

These are the obvious patients one might be suspicious of but I must add that the index of suspicion must be raised in any patient under stress whose condition abruptly becomes worse without obvious or satisfactorily explained cause.

Clinical Picture of Adrenal Hemorrhage

In any medical or surgical case which suddenly develops shock of undetermined cause, the differential diagnosis should include adrenal hemorrhage. The signs and symptoms are inconsistent at best, thereby complicating the diagnosis. Most patients have had the development of upper quadrant, costovertebral angle or flank pain, which at first may be mild and overlooked but usually becomes more severe within 12 to 48 hours. Occasionally there may be an interval of freedom from pain.

The sensory distribution usually follows the dorsal roots of T-5 to T-10. The development of hypotension and shock may lag behind the actual gland destruction from hemorrhage by as long as 24 to 36 hours. Keele and Keele[10] report that in dogs subjected to adrenalectomy, the blood chemistry changes were noted about the second day. Since this lag in development of shock is present, the early diagnosis is more difficult. Abdominal distention with or without signs and symptoms of paralytic ileus may develop.

Fever when it develops is often excessive, especially since one usually associates shock with hypothermia. The patient lapses into drowsiness, stupor and finally coma as the clinical picture progresses. X-ray is of no help unless suprarenal calcification is present (usually found in infants).[7, 8] The great difficulty in the recognition of the syndrome frequently allows the patient to lapse into irreversible shock before proper therapy can be instituted. I will not dwell on the therapy as the literature and text books are well supplied with information on the methods of treatment of acute adrenal insufficiency.

Summary

A case of adrenal hemorrhage is presented which was a postoperative complication of the repair of a ruptured duodenal ulcer in a patient with pulmonary emphysema. The numerous etiologic factors have been listed but attention was mostly directed to those pathologic processes not having a direct action on the adrenal gland.

The relationship between the exhaustion reaction of Seyle and the development of hemorrhage, necrosis or atrophy, as the case may be, seemed most logical. As yet the exact mechanism has not been satisfactorily answered. The varied and confusing clinical picture with delay in development of what one usually considers typical adrenal insufficiency shock was stressed. It is hoped that the reader will have a better appreciation of the problem and more cases will be accurately diagnosed—ante-mortem.

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From the Journal 50 Years Ago

. . . Having taken an ounce of castor oil the evening before [for the Roentgen-ray examination] the patient reports in the morning without breakfast. He is then given an ordinary portion of breakfast cereal into which two ounces of barium sulphate has been well mixed, together with a little sugar and cream. He is directed to abstain from further food until after the examination and to return six hours later. He is then stripped down to the hips; the screen is placed against the abdomen and the presence or absence of residue in the stomach from the morning meal is noted.

The patient now drinks rapidly six or eight ounces of water containing two ounces of bismuth subcarbonate, well stirred. Its entrance and descent into the stomach are carefully watched. When all has been drunk, the observer palpates toward the pylorus, and is often able to drive a quantity through into the duodenum, thus visualizing it. He then presses the bismuth in the stomach upward, watching the outline of the greater and lesser curvatures.

Sixteen ounces of potato-starch pap containing two ounces of bismuth subcarbonate and flavored with syrup of raspberry is then drunk by the patient. Usually this fills the stomach quite well, outlining it clearly. Irregularities which may have been previously observed with the bismuth water are palpated to determine their nature and permanence. Mobility and peristalsis are also determined. Plates are then made, the patient standing with his abdomen against the plate holder, with the upper edge of the plate at or near the nipples. . . .—"The Roentgen Ray as an Aid in the Diagnosis of Gastric Cancer and Ulcer" by R. D. Carman, M.D., *JISMA*, November, 1913.

Occlusive Topical Treatment of Dermatoses

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CERTAIN CHRONIC dermatoses have long been therapeutic problems. Length and inconvenience of treatment, often necessitating the use of cosmetically unacceptable preparations and involving the loss of considerable time from work; cost of continued medication; the occurrence of side-effects due to treatment; and the recalcitrance of lesions despite all efforts have led dermatologists to continue to search for new methods of treatment.

The advent of steroids have further complicated the situation in that, systemically, they may produce rapid clearing of many types of lesions only to have them recur, often with increased severity, when the medication is withdrawn.

Locally, however, the steroid preparations continue to offer hope for good therapeutic response. The ability to get maximal concentrations of an effective steroid preparation "into" the affected skin appears to influence the response. Recently various "tattooing" procedures and other methods of intralesional injection have been used with success where, previously, simple topical application of the same medication to the same lesions in the usual manner had been to no avail.

The purpose of this paper is to bring attention to another method of topical therapy which is rapidly gaining favor. In addition, we will report the results and impressions gained from the treatment of 29 patients employing this method in conjunction with a newly proven topical medication, flurandrenolone.[1] An impermeable plastic wrap as an occlusive dressing is the method used. The modern use of the impermeable occlusive dressing dates from the work of the late Dr. John Garb[2] and wider experience has been reported recently by Sulzberger and Witten.[3, 4]

Materials and Methods

Saran Wrap (Dow Chemical Co., Midland, Mich.) has been the plastic wrap used in this study wherever contours lent themselves to round-and-round wrapping. For the hands we used a disposable polyethylene-type glove (Sensi-Touch Dispensa Glove, Mercury Mfg. Co., Pittsburgh, Cal.).

When larger areas of the torso, or perhaps perineum or buttocks were involved, "T-shirts" and "shorts" or "panties" were fashioned from plastic garment bags of the types used by dry cleaning establishments. Holes were simply cut for the neck and the extremities and the bags donned in the usual manner. When feet were involved, they were merely wrapped round-and-round with Saran Wrap as were legs and arms. No attempt was made to cover areas on the face or scalp.

Transparent plastic tape was used when necessary to secure loose ends or to prevent the dressing slipping down an extremity. It was suggested to the patients that an appropriate garment, e.g., cotton socks for hands and feet, pajama top, shorts, etc., be

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worn over this plastic to provide closer approximation of the dressing to the skin.

In all cases the patient was advised to apply his medication at bedtime, leaving a small excess on the skin and covering with the plastic wrap and appropriate garments. Upon arising the dressings were removed and left off during the day. The medication alone was sparingly applied twice during the daytime.

In our original few patients, five percent crude coal tar and five percent ammoniated mercury, both in a plain petrolatum base, were the medications used. Subsequently, all cases were treated with flurandrenolone,* an occasional suitable case being subjected to the method of paired simultaneous and symmetrical studies to attempt to determine the relative value of other steroid preparations.

Triamcinolone acetonide and dexamethasone phosphate were the other steroids used. The flurandrenolone was applied in ointment, cream, or lotion forms.

Selection and Studies

Case selection was random with the exception that particular attention was applied to accruing as great a number of cases of psoriasis as possible. Selections included psoriasis (9) ; nummular eczema (4) ; atopic dermatitis (4) ; lichen planus (3) ; lichen simplex chronicus, dyshidrosis, and granuloma annulare (2 each) ; and a single case of neurotic excoriations, chronic contact dermatitis, and dermatitis herpetiformis pustulosa.

In addition, several of the patients whose dermatoses were generalized were admitted to the hospital and their entire bodies, with the exception of the head, were inuncted three times a day and wrapped nightly with the plastic dressing for several successive days. By the method described by Ridolfo *et al.*,[5] an attempt was made to determine whether absorption and systemic action of the medicaments played any part in the response to therapy.

In this procedure, baseline absolute eosinophils, blood cortisol, and urinary 17-ketosteroids and 17-hydroxycorticosteroids are determined on two consecutive days. On the third day, 50 units of ACTH are given by intravenous injection in 500 cc.'s of dextrose in water. The absolute eosinophils, blood cortisol, urinary 17-ketosteroids and 17-hydroxycorticosteroids are again determined. Blood levels are always measured at the same time each day.

Twenty-four-hour urinary 17-ketosteroids and 17-hydroxycorticosteroids are again determined on two successive days following the ACTH challenge dose. In a patient whose adrenal-pituitary axis is intact, the use of ACTH will result in a lowering of the absolute eosinophils and an elevation in the blood cortisol, 17-ketosteroids and 17-hydroxycorticosteroids.

Also, by serial biopsy and histologic examination during the course of the clearing of lesions of psoriasis, the actual site and manner of action of the medication were investigated.

Clinical Response

In general, the results of this method of therapy were considered to be dramatic (Table 1). In addition to the frequent comment volunteered by the patient that a pruritic or otherwise symptomatic lesion had actually become entirely asymptomatic after only one night of therapy, it could also be demonstrated objectively that lesions had improved as much as 50 to 70% in 48 to 72 hours.

Quickest to respond were the dry, painful, fissured lesions of the hands and feet. Old, recalcitrant thickened plaques of psoriasis, lichen simplex chronicus, and atopic dermatitis could be seen to improve 75 to 95% in two to three weeks or less. (Examples of response of various dermatoses to flurandrenolone therapy are demonstrated in Figures 1 through 6.) Of particular interest to us was the steady and almost complete response of one generalized case of lichen planus and two complete and very rapid responses in cases of granuloma annulare, as well as the implication by the response of case 12 (Table 1) and case 17 (Table 1 and Figures 3 and 4) that perhaps a lotion vehicle may be more effective in

*Supplied as Cordran® through the courtesy of the Eli Lilly Company, Indianapolis.

RESULTS OBTAINED BY NEW METHOD

Cose No.	Potient Age Sex	Diognosis	Durotion Prior to Rx.	Previous Rx.	Results	Durotion of Present Rx.	Results	Complicotions	Miscelloneous
1	A. B. 35 yrs. W. F.	Psoriosis (of polms)	4 yrs.	Ammonioted mercury, Superficiol x-roy, Tors, Cordron	Inconsistent, moderote improvement	48 hrs.	70% improvement		This potient used 5% crude cool tor in white petrolotum.
2	V. C. 65 yrs. C. F.	Nummulor Eczemo	2½ yrs.	Vioform, Cordron, Ilosone, Sulfopyridine	Moderote improvement to ploteou	2 wks.	80% improvement		Potient used 5% ommonioted mercury ung.
3	J. G. 25 yrs. C. M.	Psoriosis	3 mos.	Goeckermon regimen	Moderote improvement	2 wks.	50% in 48 hrs. 90% over-oll improvement	Folliculitis; this hod occurred once previously with tors	Poired studies ogoinst plocebo ond ogoinst Triomcinolone; obsorption studies done.
4	C. S. 26 yrs. W. F.	Lichen Plonus (generolized)	2 yrs.	Orol Steroids, B_{12}, Superficiol x-roy	No help	3 mos.	98% better		Poired studies: Cordran more effective thon Dexomethosone.
5	C. C. 68 yrs. W. M.	Atopic Dermotitis (generolized)	6 mos. 15 yrs. ocrolly	Mony types of topicol Rx. plus x-roy	No help	2½ mos.	Generolized improvement 95%-Acrol improvement 75%	Mild, occosionol folliculitis	
6	L. C. 64 yrs. W. F.	Psoriosis (honds)	10 yrs.	All types, including orol steroids	No help	2 mos.	85% improvement		
7	J. P. 14 yrs. W. M.	Atopic Dermotitis	1 yr.	Tors, diets	No help	3 wks.	80% improvement		Poired symmetricol studies with Triomcinolone showed Cordron to produce better results first 3-4 doys; obout some thereofter.
8	F. H. 24 yrs. C. M.	Dermotitis Herpetiformis Pustuloso	1 wk.	Sulfopyridine, Vioform, Ilosone, Chloromycetin, Methylprednisolone	No help	1 wk.	0-5% better		Results probobly due only to ung. bose providing lubricotion
9	L. N. 43 yrs. W. F.	Lichen Simplex Chronicus	1 yr.	Phenoborbitol, Ultron, Sporine, Benedryl, Cordron	No help	2½ mos.	90% improvement		Reported complete symptomotic relief ofter 1st opplicotion.
10	P. C. 65 yrs. W. M.	Psoriosis with orthritis	25 yrs.	All types	No help	1 wk.	50% improvement		Lost to follow up ofter second visit; Poired studies with Dexomethosone showed no difference.
11	H. N. 28 yrs. C. F.	Nummulor Eczemo	1½ yrs.	Sulfopyridine, Cordron	No improvement	2 wks.	50% improvement		Lost to follow up ofter second visit.

Continued on next poge

Case No.	Patient Age Sex	Diagnosis	Duratian Prior ta Rx.	Previaus Rx.	Results	Duration af Present Rx.	Results	Camplicatians	Miscellaneaus
12	O. F. 37 yrs. W. M.	Psariasis	20 yrs.	Tars	Maderate impravement	2 mas.	Variable—(see miscellaneaus)	Falliculitis and mild staining (anthralin)	Paired symm. studies with 3 ather praducts: Areas Rx'd with Cardran 90-95% imp. Areas Rx'd with Anthralin-Cord SA 60-90% imp. Areas Rx'd with Triamcinolane 40-60% imp. Areas Rx'd with Blind formulo 10-20% imp. Cardran latian dramatically better an this patient than cream ar ung.
13	C. M. T. W. 18 yrs.	Lichen Planus	2 mos.	Bistrimote	Na impravement	2 mas.	25%		
14	M. L. 52 yrs. C. M.	Dyshidrosis (hands)	2 mas.	Cardran, Aquaphar	Slight impravement	2 mas.	40% imp. in 48 hrs. 70% total impravement		Complete relief af itching with first applicatian.
15	A. B. 50 yrs. W. F.	Psariasis	1½ yrs.	None		1 ma.	70% impravement	Primary irritant cantact dermatitis	Paired studies shawed that Anthralin-salicylic acid-Cordran preparatian actually cleared psariatic plaque faster than Cardran alane.
16	J. C. 47 yrs. C. M.	Nummular Eczema	6 mas.	Unknawn steraid latian; Cardran Ointment x 1 wk.	Slight impravement	2½ mas.	95% impravement		
17	M. W. 13 yrs. W. F.	Psariosis	3 yrs.	Many ungs; x-ray	Na improvement	6 wks. 7½ wks.	50% impravement 95% impravement		Asymptamatic after first few days; dramatically improved after switched ta lation.
18	D. W. 23 yrs. C. F.	Lichen Simplex Chranicus	3 mas.	Nane		10 days	65% impravement		Marked symptamatic decrease after 24 hrs. Asymptamatic at 4 days. Last ta fallaw up after secand visit.

Case No.	Patient Age Sex	Diagnosis	Duratian Prior ta Rx.	Previaus Rx.	Results	Duratian af Present Rx.	Results	Camplicatians	Miscellaneaus
19	A. A. 6 yrs. C. F.	Atapic Dermatitis	7 mas.	Nane		1 wk.	75% improvement		Last after ane fallaw up visit.
20	H. W. 46 yrs. W. F.	Neurotic Excariatian	2 yrs.	Many hame remedies and pills	Na impravement	3 wks.	98% improvement	Mild fal-liculitis	
21	J. M. 54 yrs. W. M.	Nummular Eczema with secandary bacterial infectian	3½ mas.	Nane		10 days	100% impravement	Mild fal-liculitis	Asymptamatic after first appli-catian.
22	C. S. 24 yrs. C. M.	Granuloma Annulare	1 yr.	Introlesianal injectian af twa different steraids	Cleared 2 small areas which later shawed otraphy	1 wk.	100% impravement		
23	L. B. 89 yrs. W. M.	Chranic Cantact Dermatitis (honds)	3 wks.	Petralatum	Na impravement	4 days	90% impravement		Asymptamotic in 48 haurs.
24	A. S. 39 yrs. W. F.	Dyshidrasis (hands)	4 wks.	Nane		10 days	90% impravement		
25	D. W. 14 yrs. W. F.	Granulama Annulare	3 wks.	Nane		3 days	100% impravement		
26	J. M. 50 yrs. W. M.	Psoriasis (honds)	3 yrs.	Praprietary aintments, steraid injectians	Maderate temparary improvement	2 wks.	90% impravement		
27	J. G. 35 yrs. W. F.	Psariasis	8 yrs.	All types af ungs.	Na impravement	1 wk.	75% impravement		Fissures an palms and sales healed in 48 hrs.
28	V. B. 5 yrs. C. F.	Atapic Dermatitis	4 mas.	Cardran	Moderate impravement	1 wk.	70% impravement		
29	L. S. 38 yrs. C. F.	Lichen Planus (palms)	6 wks.	Cardran Creom x 2 wks.	Only slight subjective impravement	4 wks.	45% improvement		

TABLE I



FIGURE 1
CASE NO. 3, prior to therapy.



FIGURE 2
CASE NO 3, six weeks after institution of therapy.

psoriasis than either the cream or hydrophilic ointment, when used in this manner. Our case of notoriously stubborn neurotic excoriations showed surprising improvement, while our one definite failure occurred in the case of dermatitis herpetiformis.

Absorption Studies—The patients admitted to the hospital and subjected to total body inunction and wrapping, provided data which showed that absorption and systemic action of the medication did not occur (Table 2). This was as we would expect since we had clinically observed that when treating large areas, e.g., arms and trunk, we could at the same time observe similar, untreated lesions elsewhere on the body which showed no improvement.

Histologic Response in Psoriasis—Studying the histologic materials of the regressing lesions of psoriasis, we were able to observe the gradual shrinking back of the large, acanthotic rete ridges, the disappearance of the hyperkeratosis and parakeratosis, and even of the inflammatory infiltrate.

However, even when the skin had returned almost to normal by gross clinical observation, two histologic features remained just as they had been in the full-blown lesion. These were (1) the widely dilated papillary capillary and (2) the suprapapillary thin-



FIGURE 3
CASE NO. 17, after several weeks therapy with cream and ointment.



FIGURE 4
CASE NO. 17, ten days after changing to lotion.



FIGURE 5
CASE NO. 21, prior to therapy.

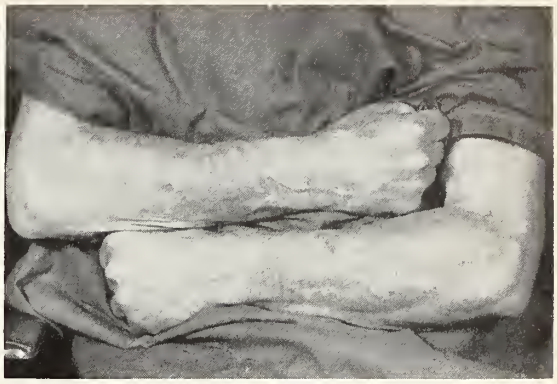


FIGURE 6
CASE NO. 21, one week after institution of therapy.

ning of the stratum Malpighii (Figures 7 and 8). The former verifies the gross work done by Lawler and Vineyard[10] with cellophane tape stripping and capillary microscopy.

Side-Effects

The only side-effect brought to attention in our group of patients was a rather peculiar type of folliculitis which manifested usually as groups of inflammatory papules, occasionally having a small pustule atop the papule. This was definitely a folliculitis rather than a miliaria, which seems paradoxical, and though this had occurred once previously in a patient using tar (patient number 3), none of the patients who suffered the complication this time were using any tar preparation. We are unable to explain this effect unless it would be something akin to the phenomenon of "steroid acne" or simply due to the mechanical blockage of the follicular orifices by ointment and debris. However, if the latter be true, then the question still remains "Why no miliaria?"

For the most part, patients found this wrapping quite comfortable even during extremely warm, 80 to 90° F., temperatures; however, two who were on total body wrapping complained of mild discomfort due to heat.

Attention should also be called to the chemical primary irritant reaction suffered by patient number 15. Although the actual lesions responded quite well, the surrounding normal skin reacted violently to the

REPRESENTATIVE TABLE OF ABSORPTION STUDIES
CASE No. 3

Date	Medication	Absolute Eosinophils	Blood Cortisol[6]	Urinary 17-Ketosteroids mg./24 Hours[7, 8]	Urinary 17-Hydroxycorticosteroids mg./24 Hours[9]
7-14-62	Control			10.3	5.8
7-15-62	Control			9.6	5.4
7-16-62	50 Units ACTH	8:40 a.m.—231 5:30 p.m.— 66	8:00 a.m.— 23 gamma 5:30 p.m.— 42 gamma	14.2	18.2
7-17-62	Control			8.2	4.2
7-18-62	Control			8.1	2.6

Normal values in our laboratory: Blood cortisol, 8 to 45, with a mean of 20 gamma percent; 17-hydroxycorticosteroids, 4.9 to 14.5 mg./24 hours, with a mean of 8; 17-ketosteroids, 8 to 23 mg./24 hours, with a mean of 14. These results show no evidence of corticosteroid absorption sufficient to produce changes in the normal adrenal-pituitary axis.

TABLE II



FIGURE 7
CASE NO. 3, section from arm prior to therapy.



FIGURE 8
CASE NO. 3, section of arm six weeks after therapy begun and clinically clear. (Note persistence of vascular dilatation and suprapapillary thinning.)

anthralin in the ointment. This served to point out that caution and lower concentrations should be employed when using caustic, vesicant, or other primary irritant medications when these agents are applied beneath the impermeable occlusive plastic wrap.

Recurrence

Although sufficient time has not yet elapsed to allow adequate follow-up evaluation in all cases, it is apparent that nearly all atopics, many dyshidrotic and nummular eczemas, and most of the lichen simplex cases may be expected to maintain their improvement upon cessation of treatment; whereas psoriasis, and perhaps lichen planus, tends to recur rather rapidly when therapy is stopped.

We did find, however, that remission could be fairly well maintained by weaning the patient off the wrapping procedure and then doing the same with the flurandreno-

lone to the point where improvement could be maintained for several weeks on, for example, one thin application of flurandrenolone daily or every other day without any wrappings. Furthermore, when recurrence did occur, re-institution of the full therapeutic program again produced results equally as impressive as those of the first course.

Inferences and Interpretations

It seems definite now that the occlusive plastic wrap serves in some manner to enhance or potentiate the therapeutic value of topical steroid preparations and probably other medicaments as well. As more experiences accumulate, it becomes apparent, too, that this method of therapy is probably most suitable in cases where it can be used as a short-term method to gain rapid response so as to be able to substitute ambulatory treatment for formerly long periods of convalescence and loss of work time, or to produce resolution of lesions until a spontaneous remission supervenes.

In the absence of demonstrable evidence of systemic absorption, we must assume that the occlusive wrap promotes greater local concentration of the medicament. Previous authors feel that greater physical proximity of the medication plus epidermal maceration[3] and increased moisture retention[11] weaken the "barrier area" and promote percutaneous absorption. With this we must agree.

In regard to psoriasis and the histologic picture that is exhibited as a lesion responds, we wonder if perhaps the basic pathological change in psoriasis is indeed in the papillary capillary.

While the intralesional injection of corticosteroids has recently become a popular method of treatment of the indolent localized plaque of psoriasis, lichen planus hypertrophicus, lichen simplex chronicus, or atopic dermatitis, we would point out several advantages of the occlusive wrap dressing:

1. The obtaining of equal results in equal or less time.
2. The absence of any post-treatment "atrophy."
3. The production of an actual physical barrier to interrupt the scratch-itch-scratch cycle when this exists.
4. The atraumatic method of application of the medication.
5. The relief of the physician from the performance of the time-consuming injections.
6. The suitability of large areas to treatment.

Only three disadvantages can be seen:

1. The probability of shorter duration of effect or earlier recurrence, if recurrence is to occur.
2. The susceptibility to folliculitis.
3. The discomfort experienced by an occasional patient when sleeping under an occlusive plastic wrap in warm weather.

Although our series was admittedly small, we feel that this is an excellent therapeutic method. From this experience and previous experiences employing symmetrical paired studies with only the simple topical application and not employing plastic wraps, we feel flurandrenolone to be among the most effective of the currently available topical steroid preparations.

Although we have had no experience with the exfoliative stage of psoriasis or other dermatoses in this series, we have observed, on previous occasions, quite favorable responses of this stage of the disease to simple inunction of flurandrenolone without occlusive plastic dressings. We would therefore suspect that exfoliative dermatitis, and perhaps necrobiosis lipoidica, discoid lupus erythematosus and alopecia areata as well, might lend themselves to therapy by the occlusive plastic wrap. We eagerly await the reports of the experience of others with these and other entities.

Summary

A new method of topical therapy employing the use of pliable plastic wrap as an impermeable occlusive dressing is presented and described.

The described method appears to be an addition of definite advantage to the arma-

mentarium of those who treat chronic diseases of the skin.

Flurandrenolone affords dramatic results when applied beneath the plastic wrap and is preferred by the authors as one of the most effective of the currently available steroid preparations. The advantages and limitations of this method as compared to the intralesional injection of steroids are enumerated.

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Out at the Elbow

We have all heard of—if not seen—fatalities caused by "lifting the elbow" too frequently. A British physician has reported a strange new twist in elbow-bending.

A 57-year-old woman was admitted to a hospital in Sudbury, England, with a number of physical signs, the most obvious being a deep gangrenous ulcer the size of a tangerine on the posterior aspect of the right elbow. Despite initial response to treatment the patient died, and among the postmortem findings was a septicemia from the elbow.

At the inquest several witnesses stated that the patient used to sit leaning on her elbow for days at a time. Presumably, reports Dr. A. E. Gibbs in the British monthly *The Practitioner*, this accounted for the extensive pressure sore.—*Medical World News*, Feb. 1, 1963.

Post-Abortal Clostridial Sepsis

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OBSERVATION of a patient with severe post-abortal clostridial infection displaying many typical features of the septic type infection led to a review of some of the dominant but less well-emphasized features of this disease.

Although Welch and Nuttall[1] first described the causative organism in 1892, the disease probably has been known since 1597 when Leduc described the emission of a violet flame accompanied by a sulphurous odor from the vulva of a woman who had been in labor for three days.[2] The organism was first cultured ante-mortem by Dobbin[3] in a case of puerperal sepsis in 1897. An extensive review of the early literature was made by Rendle-Short.[4]

Clostridial infections present a varied clinical spectrum. The organism can be cultured from the vagina in two to six percent of normal pregnant females.[5, 6] Invasion of macerated fetal tissue may take place without maternal morbidity. Maternal infection begins with an endometritis which may spread into the pelvic and peritoneal cavities. Physometra may or may not be present. Where bacteremia occurs, clinical illness may be absent.[7] In the most severe forms, metastatic gas gangrene or septicemia may be present. The present case was the fulminating septic type.

Case Report

The patient was a 38-year-old gravida V, para IV, white woman whose last normal menstrual period was in October, 1961. She was unaware she was pregnant until February 12, 1962, when a spontaneous abortion with mild bleeding occurred. She was examined at home by her physician who thought the abortion was incomplete.

The patient refused hospitalization and was treated at home with pituitrin, ergotrate and benzathine penicillin G. No further symptoms were noted until February 15, 1962, when the sudden onset of chills, fever, cramping pain in the lower abdomen, and a moderate vaginal discharge was noted. Shortly thereafter she passed a small amount of dark red urine. She was hospitalized locally.

Diffuse reddish cyanosis of the skin and mucous membranes as well as engorgement and cyanosis of the vulva were observed. Anemia, hemoglobinemia and hemoglobinuria were demonstrated. She was treated with whole blood, penicillin, tetracycline and hydrocortisone. On February 16, 1962, the patient was transferred to the Indiana University Medical Center.

Physical examination revealed a well-developed, well-nourished, mentally alert, white woman who was acutely ill. Her blood pressure was 125/75 mm. Hg, temperature was 38.3° C. (100.9° F.) rectally, and her pulse was 90 per minute and regular. The skin was diffusely dusky and brownish-red. This was particularly striking over the face. Jaundice was present as was cyanosis of the lips and nail beds.

Occasional rales were heard over the lower lobe of the right lung dorsally. No abnormalities were noted in the examination of the heart. The liver was palpable 1 cm. below the right costal margin. No evidence

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Editor's Note

The opinions expressed are those of the authors and do not represent official Air Force policy.

of mechanical interference with the pregnancy was noted and a small amount of dark blood was present in the vagina. The cervix was soft, large and bluish. The external cervical os was dilated and contained a large clot which was removed with very little bleeding. The uterus was mobile, soft, slightly enlarged and non-tender.

The serum bilirubin level on admission was 8.2 mg. per 100 ml. (4.1 direct and 4.1 indirect). Prothrombin time was 61.9 seconds (control 13 seconds), hemoglobin level was 8.5 gm. per 100 ml. and the hematocrit was 25%. A marked left shift was present in the white blood cell differential count (Table 1). Large rectangular gram-positive bacilli were observed in a direct endometrial smear the morning following admission.

Hospital Course

Sodium penicillin, tetracycline, polyvalent gas gangrene antitoxin and tetanus antitoxin were administered. She was transferred to the contagious disease ward, and an acute renal failure regimen was instituted. The administration of steroids was continued since they had been started prior to admission, and it was hoped they might alleviate the acute hemolytic process. Administration of gas gangrene antitoxin required large amounts of intravenous fluids so that it was impossible to adhere strictly to an acute renal failure treatment program.

On February 18, 1962, a total abdominal hysterectomy was performed. At surgery, the uterus was edematous and of an ashen color, but no crepitus was noted in the parametrial tissue. The peritoneum appeared to be free of any inflammatory process. Necrotic decidua and slight infiltration of the myometrium by polymorphonuclear leukocytes, without the presence of gas or myometrial necrosis, were observed in the surgical specimen.

Gram-positive bacilli, morphologically consistent with clostridia, were demonstrated in the necrotic decidua (Figure 1).

Because of a rising level of blood urea nitrogen and hyperkalemic changes on the electrocardiogram, intermittent peritoneal dialysis was begun, 14 hours after surgery. This was accomplished without difficulty and was continued until February 26, 1962. At no time were anaerobic organisms cultured from the return of the dialysis fluid. The patient's condition improved.

On February 21, 1962, the patient became confused and had a grand-mal seizure. Extremely high blood sugars were first noted that morning (Table 1). Hyperglycemia without acetonuria was a persistent finding thereafter. From this time, the patient appeared to be slowly deteriorating. Almost constant hiccoughs were present which interfered with respiration.

On February 25, 1962, a tracheotomy was performed, and a mechanical respirator utilized. On February 27, 1962, intermittent peritoneal dialysis was re-instituted. Repeated episodes of hypotension occurred, and vasopressors were administered frequently.

The patient had a cardiac arrest on March 1, 1962. A normal sinus rhythm was restored after the use of external cardiac massage, intracardiac adrenalin and electrical stimulation. She died the following morning. A post-mortem examination was performed.

Autopsy

Gross: The incision in the peritoneum at the surgical site was unhealed and approximately 10 cubic centimeters of clotted blood and necrotic tissue were present in this region. No evidence of entrapped gas was found at this site nor in other organs or cavities examined. A partially necrotic corpus luteum was present in the left ovary. The weight of each kidney was approximately 290 grams, and the appearance of each was similar.

The cortices were soft, swollen, mottled light tan and red, and slightly friable. The pyramids were dark red and darker red streaks were observed oriented in a direction parallel to that of the collecting tubules. The pelves contained a small amount of blood.

The weight of the liver was 2,200 grams; the margins were blunt, and the cut edges bulged slightly. Minute foci of soft yellow tissue were observed about central veins. The spleen was soft, dark red and weighed

LABORATORY DATA

	2/16	2/17	2/18 Surgery	2/19	2/20	2/21	2/22
Na mEq/L	138	130	123	128	138	139	146
K mEq/L	5.5	4.8	4.5	5.0	4.1	4.2	4.4
Cl. mEq/L	101	96	95	91	85	90	93
CO_2 mEq/L	11.6	10	9.5	8.3	16.9	20.3	21.3
BUN mg/100 ml	57	90	132	180	123	115	95
Sugar mg/100 ml				201	>900	1,370	1,040
WBC	42,600	49,000	40,000	30,000	20,750	16,550	20,950
Urinary Output (cc)	70	58	53	69	132	67	61
Peritoneal Dialysis				X	X	X	X

	2/23	2/24	2/25	2/26	2/27	2/28	3/1
Na mEq/L	144	144	153	146	145	142	141
K mEq/L	4.6	4.7	5.2	6.0	5.2	5.4	5.7
Cl. mEq/L	94	85	85	85	88	87	91
CO_2 mEq/L	30.7	27	34	28.2	30.8	18	15.7
BUN mg/100 ml	105	146	132	99	137	123	54
Sugar mg/100 ml	972	720	740	932	696	816	1,424
WBC			16,550	23,300	11,150	5,000	5,700
Urinary Output (cc)	30	33	30	28	17	34	
Peritoneal Dialysis	X	X	X		X	X	

TABLE I



FIGURE 1
TWO LARGE gram positive bacilli in necrotic decidua in the surgical specimen (X2500).

55 grams. Malpighian bodies could not be identified. The weight of the brain was 1,280 grams, and the meninges were thin and translucent.

Microscopic: The epithelium of many of the proximal convoluted tubules of the kidney was swollen and protruded into the lumens (Figure 2). Hemoglobin casts, many of which were surrounded by polymorphonuclear leukocytes and an occasional multinucleated giant cell, were present in the collecting tubules (Figure 3). The cells about the central veins of the liver contained many vacuoles of varying size (Figure 4).

Some of these were clear while in others amorphous eosinophilic material was present. The central veins and adjacent sinusoids were not filled with erythrocytes, but the sinusoids in the periphery of these lobules were congested. The myocardial fibers were separated by edema, and a few necrotic cells were observed.

A slight increase in the number of mononuclear leukocytes was present in the interstitial tissue of the heart. Exhaustion atrophy was noted in the spleen. The acini of the pancreas were dilated and filled with secretion. The interstitial fibrous tissue was slightly increased in amount, and an infil-

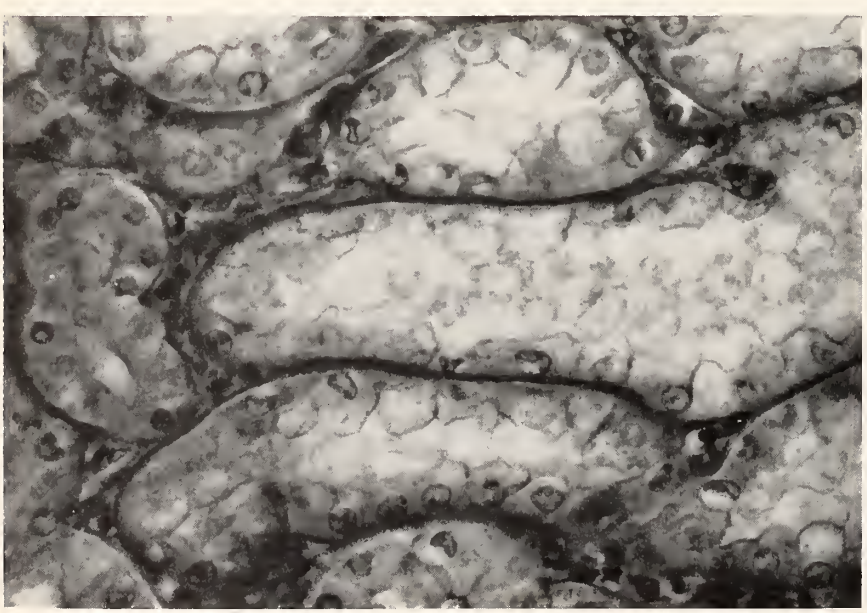


FIGURE 2
ADVANCED hydropic degeneration of the epithelium of the proximal convoluted tubules. Note that the involvement is not present to the same degree in all regions (X600).

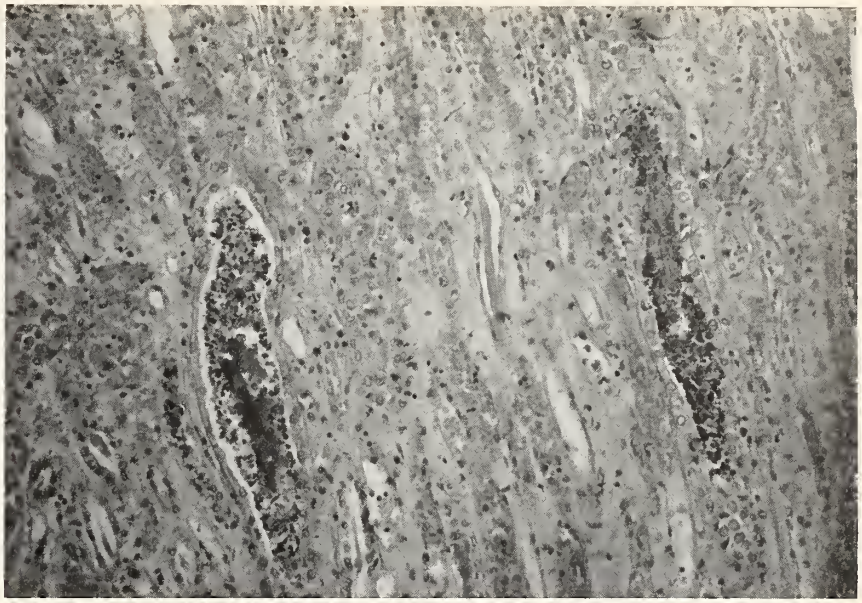


FIGURE 3
HEMOGLOBIN CASTS surrounded by polymorphoneucleor leukocytes in collecting tubules of the renol medullo (X200).

trate of mononuclear cells was present in this tissue.

The number or appearance of the islets of Langerhans was not remarkable (Figure 5). Hyperplasia of all elements, but especially of the megakaryocytes of the vertebral bone marrow was observed. An infiltrate of polymorphonuclear leukocytes and mononuclear leukocytes was present in the meninges. The cytoplasm of the leukocytes was not distinct so that identification of the type of cell was difficult, but many appeared to be immature granulocytes.

Gram-negative bacilli were observed in this infiltrate in sections stained with bacterial stains (Figure 6). In many of the bronchioles, and some of the alveoli of the lungs, gram-positive cocci, morphologically consistent with staphylococci, were observed.

Bacteriology: Clostridium perfringens, type A, with significant production of alpha toxin was isolated post-mortem from tissue removed from the operative site. Staphylococcus aureus, coagulase positive, was grown from the liver and blood. Pseudomonas aeruginosa was cultured from the site of surgery and from the liver.

Cultures from the brain and lungs were

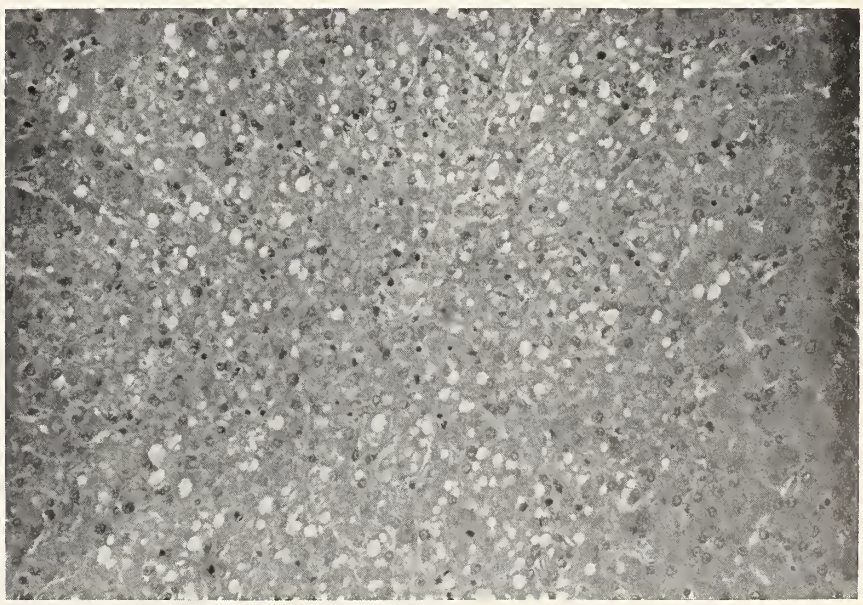


FIGURE 4
NUMEROUS cytoplosmic vocuoles in hepotic cells in the centrol portion of a lobule (X250).

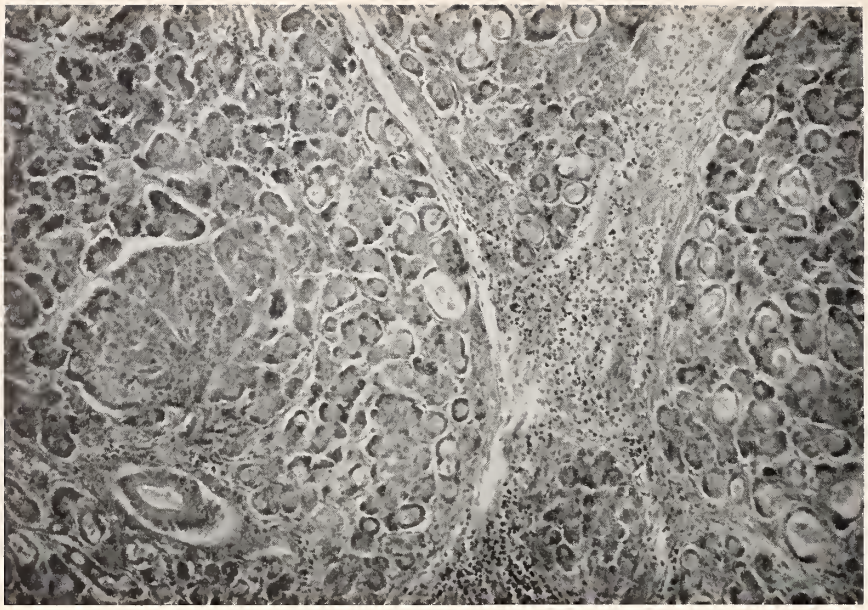


FIGURE 5
NOTE THE infiltrate of lymphocytes in the interstitial tissue of the pancreas and the dilated acini containing secretions. A normal appearing islet is present (X100).

not obtained, because the infectious process was not suspected from the gross appearance.

Discussion

The clinical syndrome of clostridial sepsis is dramatic. Typically, a rather sudden onset of chills, fever, nausea, vomiting, diarrhea, and lower abdominal pain, starting 48 to 72 hours post-abortion, is noted. The patient is usually alert but apprehensive. The pulse may be disproportionately high in relation to the fever.

The intense red-brown cyanosis of the skin and mucous membranes is outstanding. This striking physical finding in this case was commented upon by all examiners before the diagnosis was established. It was first described by Young and Rhea in 1909,[8] and has been repeatedly recorded as a prominent observation in subsequent reports. There is usually tenderness to palpation over the lower portion of the abdomen, and vulvar edema is a fairly frequent finding.

Since many cases of clostridial sepsis are secondary to criminal abortion, pelvic examination may reveal evidence of trauma. There is frequently a moderate amount of dark vaginal discharge. Crepitus may be elicited on palpation of the uterus and

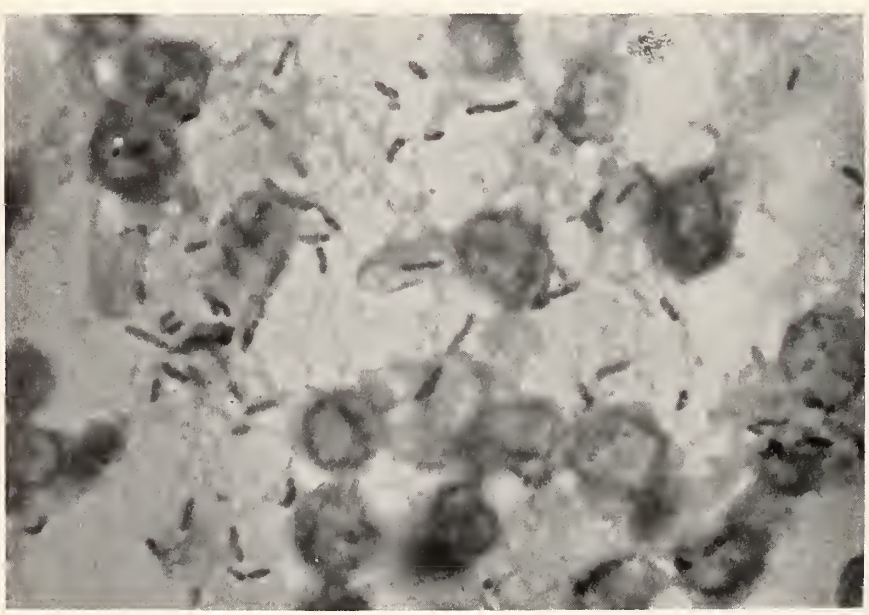


FIGURE 6
GRAM-NEGATIVE bacilli in the meninges. Note the indistinctness of the leukocytes (X2500).

parametrial tissues. Bubbles of gas may escape from the external cervical os accompanied by a sulphurous odor. If metastatic lesions are present in skeletal muscle, they are accompanied by excruciating pain.

The urine is scanty and loaded with debris. The free hemoglobin present imparts a deep red color. The serum is also deep red owing to hemoglobinemia. A marked anemia is present, and the red blood cell count may fall rapidly. There is an intense leukocytosis with polymorphonuclear forms predominating. The depressed platelet count, diminished serum fibrinogen level, and increased prothrombin time all contribute to a prolonged clotting time.

Cause of Hyperglycemia Hypothetical

The persistent hyperglycemia noted in our patient was striking. Although a blood sugar of 600 mg. per 100 ml. was noted in a patient reported by De Alvarez and Wolter,[9] they made no further comment about it, nor have comments about this finding been noted in other case reports. The explanation for this finding perhaps lies in the intense hepatic glycogenolysis caused by Clostridium perfringens toxin as demonstrated by Berg and Levinson in their experiments on dogs.[10]

Some hyperglycemia might be expected coincident with the administration of intravenous hypertonic glucose solutions and the use of hypertonic glucose solutions in peritoneal dialysis. In 71 peritoneal dialyses performed at this hospital since January 1, 1962, the highest blood sugar level observed was 304 mg. per 100 ml. in non-diabetic patients, although the highest level noted in diabetics was 584 mg. per 100 ml.[11] A slight interstitial pancreatitis was present, but no gross destruction of the pancreas or alteration of the islets of Langerhans was found.

The management of clostridial sepsis involves general supportive care of a critically ill patient, the administration of whole blood or packed red blood cells to replace the loss from the severe hemolysis, antibiotics, antitoxin and treatment of acute renal failure. The antibiotic of choice is penicillin, although the organism may be sensitive to broad spectrum antibiotics. Bacterial sensitivity studies should be used to guide therapy.

Although most clinicians advocate the use of polyvalent gas gangrene antitoxin, the amount of fluid administered in giving this preparation intravenously to patients with acute renal failure results in overhydration. The usual treatment of acute renal failure is employed; that is, careful management of fluid and electrolyte therapy, administration of hypertonic glucose solution to minimize tissue catabolism, treatment of hyperkalemia with intravenous glucose and insulin, ion-exchange resins, and early and judicial use of peritoneal dialysis or extra-corporeal hemodialysis.

As might be anticipated in cases where multiple antibiotics are employed in prolonged therapy, prevention of superinfection with secondary invading organisms is important. In this case, Pseudomonas aeruginosa was cultured at autopsy from the operative site and the liver. In addition, gram-negative bacilli and an infiltrate consistent with a Pseudomonas infection[12] were demonstrated in the meninges. Secondary infection with Pseudomonas has been reported previously in clostridial sepsis.[9, 13]

Surgical Treatment Debatable

The role of surgery in the treatment of post-abortal clostridial infection is still the subject of much debate. The approaches to the problem most often advocated are:

1. Early evacuation of the contents of the uterus by curettage.
2. Early total hysterectomy.
3. Delay of any surgical procedures until the infection is completely controlled by the use of antibiotics and antitoxin.

The usual surgical principle employed in the treatment of clostridial infections, that is, the removal of the necrotic focus, was employed in this case. Failure of the organism to be eliminated from the body even after intensive antibiotic therapy[13] would tend to support this approach.

In one report, the organism was recovered from the cervix one month after the

patient was admitted to the hospital.[14] Hill, who collected a large series of cases, also recommended early evacuation of the uterus.[7] Godsick et al.[15] point out that while surgery removes the focus of infection, peritoneal barriers are broken and the surgical procedure itself creates necrotic tissue upon which the organism can implant. Certainly, the present case report supports this hypothesis. At post-mortem examination, 12 days following surgery, the surgical site was still unhealed and Clostridium perfringens was cultured from this region.

Recent abdominal surgery has been regarded as a relative contraindication to peritoneal dialysis. The decision to employ peritoneal dialysis so soon after surgery was based in part upon the finding at surgery of a peritoneal surface which was grossly uninfected. Eleven cultures of the dialysis fluid were obtained during the patient's hospital course. Clostridium perfringens was not isolated from any of these cultures. At post-mortem examination, aside from the site of the surgical incision, no evidence of peritonitis was found. It would seem, therefore, that peritoneal dialysis can be used with relative safety even in the immediate post-operative period in selected cases.

Since Clostridium perfringens is an obligatory anaerobic bacillus, some efforts have been made to treat clostridial infection with oxygen under greater than atmospheric pressure in an effort to halt the spread of the infection.[16] This method has been applied to skin lesions, but no attempt has been made to treat uterine clostridial infections in this manner.

Summary

A 33-year-old woman with post-abortal clostridial sepsis complicated by acute renal failure was treated with supportive therapy, a hysterectomy and intermittent peritoneal dialysis postoperatively. Prominent clinical features were hemoglobinemia, hemoglobinuria, anemia, intense red-brown cyanosis of the skin and mucous membranes, oliguria, and hyperglycemia.

Histologically, toxic changes were observed in the myocardium, liver, spleen and kidneys. The striking hyperglycemia is possibly the result of hepatic glycogenolysis as a consequence of the action of clostridial toxins. The effectiveness of surgery in the treatment of this disease is unknown. Peritoneal dialysis may be instituted in the immediate postoperative period in selected patients who have undergone intra-abdominal surgery.

Acknowledgment

The authors would like to thank Mr. Harold Raidt of the Department of Microbiology, Indiana University School of Medicine, and the Atlanta Communicable Disease Center of the United States Public Health Service for their aid in the positive identification of the organism. We are also indebted to Dr. Parker Beamer for his suggestions and review of this article.

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Is Watching Football Dangerous?

The avid sports fan who goes out to the stadium every weekend to watch his favorite football team probably thinks such recreation relaxing.

But Dr. Kenneth Rose, a Nebraska University medical researcher, now tells us that many a football fan is as tensed up as the men on the field. Dr. Rose proved it by taking electrocardiograph tracings of a spectator at a football game.

He found that an exciting game gives the heart "a terrific workout." A pass interception, for example, made the spectator's heart jump from its normal 75 heartbeats per minute to 145 per minute.

Stay-at-homes, who like to watch their football via TV, had better enjoy themselves while they can. It may be just a matter of time before Dr. Rose catches up with the quarterbacks in easy-chairs.—*New Medical Materia,* Feb., 1963.



The Case of the Barbed Barbiturate

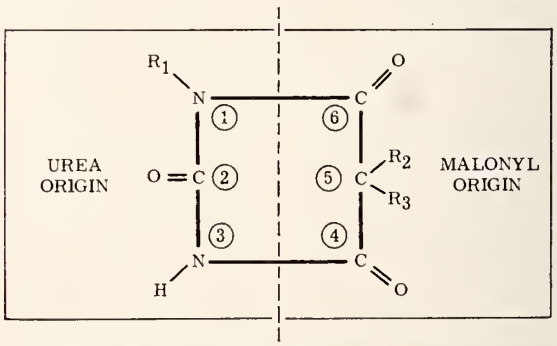
ARNOLD LIEBERMAN, M.D.
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ACCEPTED STANDARDS of treatment have varied with the passage of years; exorcism of witches from the sick and the touch of the sovereign's hand to cure scrofula—"King's Evil" are modalities of therapy no longer practiced in modern days, even if the terror of voodooism still has its devotees. Alchemy has been replaced by more modern biochemical physics; macromolecular medicine is just around the corner.

However, I do wonder whether Landra would not have been better off had she gone to an astrologer who would have cast a *convincing* horoscope; it is a certainty that my scientific approach left her totally sceptical—and totally vulnerable to the overwhelming disaster whose imminence she simply refused to acknowledge. . . .

Chemistry has come a long way from the earnest groper for the elusive "philosophers' stone." In 1828 Friedrich Wöhler re-crystallized an inorganic compound, ammonium carbamate, into urea, indisputably an organic compound. Until that day, it had been "obvious" that there *was* life-created matter (never to be duplicated by impious man) and inorganic substance put there by God for man's use. It was in 1865 that Kekule came up with the inspired notion of the "dragon swallowing its tail," i.e., the essence of the closed ring theory of carbon atom linkages. This is at the very base of present-day organic chemistry with its ring-forming, benzene-like, aromatic compounds.

In 1863, Adolph von Baeyer took some bearded moss, Usnea *barb*ata, extract and condensed this material with *urea* to get a product that he named *barbituric* acid (Figure 1). In Latin, barb means beard and denotes a bristle or a hair with a double



THERE ARE few more basic formulas that the freshman medical student has to memorize:

The R_1 R_2 R_3 can be a substituted moiety at the pharmacologist's discretian.

Emil Fischer numbered the circled atoms as shawn. The complexities of DNA analysis should nat make us forget that every nucleic acid derivative has at its very heart precisely these six atams in just that ring. . . .

FIGURE 1

hook on the end: after penetration, withdrawal becomes difficult. It was 1882 before the di-ethyl derivative of the acid, barbital, was made. After still another couple of decades, Emil Fischer and von Mering discovered this compound's hypnotic effects and doctors became very interested in the product. In the present decade of the 20th century, in the U.S.A. alone, some 600 TONS of barbital and its endless variants are being produced annually. I am amazed at the number of doses being made available—and, presumably being sold—per every living man, woman and child.*

The essential point for us here is that BARBITURATES are used—and *abused*—many times a day, every day, right around the clock. Now excessive intake can produce not only prolonged slumber, it can also stop respirations: permanently! "Goofballs" and "Yellow Jackets" are teenage appelations bestowed on barbiturates obtained illicitly and illegally, ill-used in illusion seeking, intemperate, escapist sprees. All by itself, the megalopolis of New York records at least 600 deaths per year as results of barbiturate intoxication!

How many more are passed off as something else? How many are suicides—intentional or otherwise? And—a grim topic to which we'll revert—how many are perfect murders? For every Marilyn Monroe and Margaret Sullavan—how many Janes and Johns have consumed, knowingly or otherwise, lethal quantities of the stuff and then proceeded to make their exits not with a fanfare but with hardly even a comment?

Our random ramblings begin to form a definite pattern as we take up "automatism." When questioned, almost every other doctor will come up with an answer; a consensus will state, "Oh, sure! This is a state of affairs when an apparently normal individual keeps on taking barbiturates, pill after pill; *seemingly* rational—they do not realize what is going on! An initial dose was just enough of an *overdose* to blot out their thinking powers! Now they are 'automatically,' mechanically if you will, going through the motions: the subconscious has assumed control even as the conscious has abdicated."

No matter how phrased, this conveys the essence of the physicians' reactions; very often, they will volunteer a case from their own practice.* It is rather instructive to observe the very eminent authorities that are willing to come out in print denying flatly the very existence of a phenomenon that a very substantial segment of the medical profession assumes to be a very frequent occurrence. Before going further, it may be worthwhile to read a little on the subject of *Memory* (*N. Y. Medicine*, April 5, 1962). Exactly one year later, the same journal carried a most instructive panel discussion, on *Suicide*. Both topics are analyzed in clear, non-technical language; they can be recommended as adding greatly

* In passing, it might be worthwhile to lay at rest the pretty theory that barbiton, the ancient Greek lyre-like instrument, lay at the origin of the word, barbiturate. Similarly, there has been a legend that the patented trade name for barbital (to wit: *Veronal*) was derived from Verona, the restful, sleep inducing, beautiful capital city of the Italian province of the same name. My mentor in chemistry, the late Professor J. Stieglitz, was a student of Baeyer. He was emphatic in saying, "Veronal is an easy and pleasant word to remember, that is all." I still believe his statement.

* A. Goth, in his *Medical Pharmacology* alludes to automatism on p. 199 of the 1961 edition of his text. Similarly, Gilman & Goodman in their well-known monograph, *Pharmacological Basis of Therapeutics* (2d ed., 1956) devote several pages to the topic and discuss "automatism" in some detail—"confusional state . . . unwitting ingestion of an overdose . . . diagnosis of suicide . . . is erroneous."

On the other hand, Rowland H. Long *"Postgraduate Medicine,"* (Vol. 28, No. 4, Oct. 1960, pp. A-56 through A-72) challenges the very existence of this entity. His 18 references caustically castigate and dismiss this theory forthwith: "To affirm (the thesis of automatism) is an appeal to credulity which ought not to be attempted in an intelligent society."

As recently as this June, the esteemed *JAMA* (Vol. 184, No. 12, 1963, pp. 924-929) reported that a large and very competent group from the office of the medical examiner for metropolitan Los Angeles investigated "Equivocal Suicides." While they conclude that "individuals may make a considerable contribution to their own deaths under circumstances not ordinarily considered suicide"—they examine the "hypothesis of automatism" and state that they "have been unable to confirm this *hypothesis* in these investigations."

to our knowledge of the problems under examination.

Well, with all due deference to the Los Angeles group as well as to Dr. R. H. Long, let me present, succinctly, a case from my own experience that demonstrates beyond all cavil—in my opinion —the error underlying the assumption that "patient will be asleep before ingesting a lethal quantity of barbiturates."

To Ease Ereminoia

Many years ago, the wife of a railroad conductor began coming to my office with various physical ailments; these were given appropriate treatment.

One day, while in my consultation room, she said, "By the way, doctor! My husband is away on his run 48 hours at a time. I still become nervous and have trouble falling asleep on the nights I am alone. Can you help me settle my nerves?"

The woman was a very pious, almost phlegmatic, middle-aged housewife. In context, her remark seemed quite reasonable; I gave her a prescription for forty 100 mg. tablets of phenobarbital. I told her to take *one* after supper and a second *one* at bedtime on the evenings her husband was away. "Remember! Never more than two in one evening, and at least four hours apart. The margin of safety is ten to one *but*—you never can tell! Be careful!"

A couple of weeks later, while still at home, having breakfast, I got a call from this woman's next door neighbor, "Doctor! Please come over and take a look at Mrs. R.; we were supposed to have gone shopping this morning. I came over and found her sitting in the kitchen; she seems somewhat confused. . . ."

The town was not too large and I was there within the hour. Mrs. R. and the neighbor were sitting in the kitchen. The patient greeted me; we talked a few minutes. The cause of her difficulties was being held in her hand. The bottle of phenobarbitals was no more than half full. She told me that she had been taking only one or two each night her husband had been away. The preceding night she had been particularly upset about some domestic trivia; she had taken "an extra one or two."

Careful examination was unrevealing; she did not appear too sleepy; her speech was rather rambling but she answered all my questions promptly and relevantly. The thought of hospitalizing her did not even enter my mind. I took the bottle with the remaining pills and showed the neighbor where I was stowing it: on the top shelf of the kitchen cabinet. I asked this neighbor to be so kind as to stay with the patient until her husband returned late in the afternoon. I also requested an immediate phone call should anything unusual occur.

Automatism and Amnesia

It was not yet noon when the neighbor was screeching over the phone: "Come immediately!" She had gone home to take care of her laundry. Within half an hour she was back in the patient's house. Mrs. R. was slumped over the table; still sitting on the kitchen chair—and clutched in her hand was the now empty bottle of pills. . . . While I was calling the hospital for an ambulance, respirator and what have you, my energetic associate was speeding over to the Blacklidge Drive address. Success crowned his arduous and expert endeavors: Mrs. R. recovered completely—there were no residuals. There was one startling post-barbiturate poisoning fact: Mrs. R. had no memory whatever of the events of that near fatal morning spree—neither the constant presence of the neighbor nor my house visit could she recall. Yet, I had been completely misled by her almost normal behavior.

In this particular case, we can pin-point the exact time in which 22 pills were consumed: half an hour at the outside. This is the crux of the flaw in Dr. Long's argument against automatism. I believe that Mrs. R. was swallowing a pill a *minute* and not



every 10 or 15 minutes as assumed by the critics to the contrary. The *BARB* of the barbiturate has to sink into the tissues, reach the target synapses and then go about the fatal business of paralyzing them. The time lag—even as the cortex had already abdicated—was adequate for "automatism" to do its deadly worst.

Mind you! Mrs. R. had not the remotest intent of suicide. There was just a bemused doctor—yours truly—prescribing too large an amount of barbiturate in the first place; then, medical felony was compounded when the bottle of remaining tablets was not removed altogether when I was making that morning call. The amnesia (anterograde, lacunar *or* retrograde) of the fully recovered Mrs. R. was further proof of the automatism that I had failed to evaluate properly and that Dr. Long and the Los Angeles group assert does not exist except as a figment of the imagination.*

We are now in a position to revert to an earlier query: how many murders are committed with barbiturates and then fobbed off as "suicides"? Much escapes our eye, be we doctors of medicine or heroes of escapist fiction. Dick Tracy and Sherlock Holmes to the contrary, many (of course, I cannot say *HOW* many) barbiturate deaths are labeled suicide, either accidental or otherwise, when, in fact, a perfect murder has been committed. I have very strong personal reservations about several cases that I have been called into, directly or as a consultant. Permit me to present (only thinly disguised) an instance of what I judge to be murder, premeditated, direct and brutal—and yet carried on the official records as, "barbiturate death, suicidal."

A Comatose Concubine

One Saturday night, not too many months ago, I received a phone call from a very good physician friend of mine. "Arnold! I am at home; my wife is very friendly with a lady down the hall. This woman and her husband are in my apartment right now. She tells me that her daughter was found in a coma and taken to the City Hospital late this afternoon. She is still in a coma; they want me to go with them to the hospital and see the patient. I am not on the staff of that hospital and I know you are. Please, do me a personal favor and run over to the place. You could meet the mother after you have seen the girl; please. . . ."

It was just about impossible for me to refuse. First, I called the resident. "Oh, that girl! Well, her maid came with her and brought the empty bottle of pills AND a note neatly typed to her latest boy friend. We called the pharmacy; it is only a harmless aspirin combination. The maid recognized the container and is positive that there had been only about a dozen tablets in it. We are giving her I.V. fluids anyway but she should not be too much trouble. Do come over, by all means; we have a couple of other interesting cases you might want to see."

My wife settled down to a game of Scrabble with a visitor while I drove out to the hospital. It was most fortunate that I arrived when I did. The resident met me at the nurses' station; we walked to the bedside just as the patient had decided to stop breathing! Artificial respiration, intubation, AMBU respirator, iron lung, massive stimulation directly per the I.V. tubing; hard grueling work for over two hours was rewarded, finally, by the patient starting to reverse the fatal slide to death! Pharmacy report notwithstanding, we sent blood and urine samples for emergency examination for barbiturate content. To no one's surprise, the stuff was there in ordinarily lethal amounts.

The anxious mother was told the facts; as I was leaving, long after midnight, I told her that things were looking up but still

* In October, 1963, there was a particularly flagrant instance of barbiturate automatism that I had the misfortune of seeing in consultation. A 17-year-old girl had been treated at a very well known university medical center for hyperthyroidism; before undergoing surgery she was placed on thiouracil and PHENOBARBITAL (for her nervousness); a very generous amount of medication was prescribed. Four days later she was brought into the hospital where I saw her within the hour. She was in profound coma; her mother had found her in bed with the *entire* bottle of medicine empty! Despite all treatments instituted immediately, she expired within two days! She had been a happy youngster and there could be no question of consciously attempted suicide. . . .

poised on a razor's edge. In two more days, the girl was transferred to the psychiatric ward. She denied all suicidal intent; she had only wanted to frighten the man into marrying her. The following week she was in my office. My doctor friend and the girl's mother had twisted my arm into accepting her as a private patient even as I protested that an internist could not do the young lady too much good.

Her physical recovery had been complete. She walked into my office attired as her notion of a movie star going to a picture preview. Still youthful, although fading fast, she was an arresting figure in a flashy, very expensive sheath dress. The tight bodice exposed most provocatively the bold breasts; the slashed skirt revealed flamboyant thighs almost to the rounded buttock. To my elderly masculine gaze, the still beautiful teeth and glittering eyes were marred by a vacuous smile struggling through as massive an overlay of makeup as any I had ever beheld before or since.

The eyebrows were shaved hair-line thin and the lashes were thick with mascara. The cheeks were rigid from the paint and the brilliant, garish scarlet outlining the lips produced a positively Melanesian mask. The enormous, built-up coiffure merely exaggerated the masquerade to a pitch of opera bouffe absurdity that the expensive fur stole and spiked heels of the glaring red shoes did nothing to minimize. Money shrieked from the wayward woman, yes; taste or refinement? Well, who brought *that* up?

A Sordid Story

My time was being well paid for even though my gorge of antipathy was rising by the minute. My questions were almost brutally direct; the story came straight; it was a sorry one. Her father had died of cancer when she was seven. Her mother had remarried three years later. Within a year of that event, her mother gave birth to a baby that became Landra's stepsister. While her mother was carrying the baby, the stepfather had molested Landra, more than once, sexually. My patient spoke of this with detachment but it did not require a seer to see the intense hatred developed by the then 11-year-old girl both towards her stepfather and her own mother who had permitted this to happen.*

Anyway, practically running away from home, Landra married hastily at 15. Within three years she had given birth to two children. She found sex pleasant, in spite of her horrible initiation into its mysteries. Also, she had acquired expensive tastes; her husband could not satisfy her either physically or financially; so she started philandering. Her husband was on the verge of getting a divorce when he was killed in an automobile accident. Landra then played the field with professional skill.

"Not counting the occasional quickies, how many men in the last ten years?"

She counted on her fingers and, citing them out loud said, "Eight." But the present flame was "really nice." "He is much older . . . lawyer . . . divorced . . . I *love* him . . . I want to marry him. . . . Oh, yes, I have a good secretarial job. Yes, my employer takes me out a lot—you know what I mean—but, Bernie is really special; I *LOVE* him."

"Well, Landra, you have been free with your favors with him, too; why should he buy the cow when milk is so cheap?"

"But he has *promised* to marry me!"

The patient had been requested to bring with her the entire contents of her medicine cabinet; all the prescription items and every medicine she had in there. While I had been talking with her, the nurse had called the various pharmacies and itemized the entire list: barbiturates were conspicuous by their absence! What other medicines had she taken? But NONE!

So what had she been doing the evening she took all those, ah, aspirins? Well, she had gone out on a very heavy date with her beloved Bernie; yes, they had gone up to his apartment; yes, he had mixed a lot of

* There is some sort of a prevalent notion that such things don't occur in "nice" families! Unfortunately, abominations are the lot of not only the lowly and the ignorant. (See "The Case of the Juvenile Jetsam," *JISMA*, Vol. 53, Aug., 1960.) No race, religion or color can confer immunity. It is grim history that the wealthiest Romans reveled in the most lewd debaucheries. We need no Profumo "affaire" to remind us that the top crust of our haut monde still buys these—shall we call them—indulgences?

drinks. Did he put anything else into them? Well, she had begun to get woozy and had asked for some aspirin; he had taken a couple of pills from his own cabinet and given them to her.

Why had she not stayed overnight? Well—that is why she was so peeved! He had wanted to do nothing but get her home—quick! That is why she took all those pills when she got home although she does *not* remember typing the note found in her purse; yes, she has a typewriter at home. Her memory of just what transpired after they had left Bernie's apartment is badly blurred. She *thinks* he escorted her clear to her bedroom; yes, he had a key to her apartment.

Barbiturates or Barbarity?

Well—I am no D.A. beagle but the picture was coming into focus rapidly. Leaning forward across my desk, I pointed a blunt finger at the bedizened floozie. "You stupid little girl! Has it ever occurred to you that your drinks just could have been liberally spiked by you know who? I would advise you to steer clear of this special lawyer friend of yours. Stick like glue to that nice employer who pays you an excellent salary. Of course, I have no proof but—YOU are in danger—not I."



The girl almost flounced off her chair with, "Well, I never!" Her disbelief was total; maybe my approach had been less than diplomatic. . . .

She needed no medical care and refused psychiatric referral. After she ceased darkening my door, I was most prompt in dictating a letter to the psychiatrist who had seen Landra in the locked ward at the hospital. I suggested that social service contact the patient. "It is my opinion that this woman is in much greater danger . . . than she is willing to realize."

And what brought this lengthening story to mind? Well, as I was entering the City Hospital last Wednesday, the resident piped up, "Remember the gal you saw that Saturday a while back? She came in late last Saturday—same thing—we couldn't reach you—made no difference—deep coma—went right out. Yeah! Loaded with seconal."*

The medical examiner signed her out as "barbiturate poisoning, suicide." Dare I open my mouth in an effort to disabuse him? Where is there even a scintilla of evidence or anything at all provable? ◄

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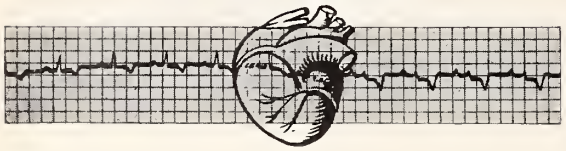
* This final footnote is for the medical student cramming for his exams or for the buff in criminal poisonings.

Drugs subject to abuse may be classified as: 1. *Narcotics*, almost all *addicting* although cocaine and cannabis (marihuana, hashish) are not; 2. Non-narcotics, which may be *addicting* (alcohol, *barbiturates*, chloral hydrate, paraldehyde, meprobamate, gluthimide, Librium) and *non-addicting* (amphetamines, mescaline, L.S.D., phenothiazines, antihistamines, etc.).

Opiate toxicity is suspected when there are supravenous tattoos, needle marks, constipation, amenorrhea, miosis, "nodding," "floating gait," pruritis, slowing respirations→coma→death. *Withdrawal* is evidenced by mydriasis, lacrimation, rhinorrhea, sticky perspiration, "goose flesh," insomnia, diarrhea, nausea and vomiting, bone pains, slight fever.

Barbiturate and *alcohol* toxicity show sleepiness, staggering gait, positive Romberg, nystagmus, slurred speech: all this ending, as with the opiates, in slowed respirations, coma and death. Withdrawal produces anxiety, fine tremors, postural hypotension, insomnia; all this can progress to actual convulsions, delirium tremens and—at times—coma and death.

Electrocardiogram of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Krannert Heart Research Institute, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

Right Bundle Branch Block and Myocardial Infarction

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IT IS WELL KNOWN that in left bundle branch block (LBBB), the septum activates from right to left and as a result the left ventricular cavity is initially positive. Because of this positivity of the left ventricular cavity, an initial Q wave is not recorded with myocardial infarction. Therefore a diagnosis of infarction is impossible in presence of LBBB.

On the other hand right bundle branch block (RBBB) does not disturb the normal sequence of septal depolarization and the septum depolarizes from left to right. Right ventricular leads (V1, V2) register an initially upright deflection and the left ventricular leads (V5, V6) an initial negative deflection. Because the left ventricular cavity remains initially negative, as it is activated from left to right, a Q wave of infarction is registered when RBBB is complicated by myocardial infarction.

Figure 1 demonstrates intermittent RBBB with an antero-septal infarction. The intermittency of BBB is demonstrated by QRS complexes varying from 0.08 to 0.12 seconds, the appearance of broad S wave in I, II, III, AVF, V5 and of an R wave in AVR and V1. It should be noted that the initial portion of the QRS does not change with appearance of BBB and that the Q waves of infarction recorded in V1, V2, V3 remain unchanged with changing conduction.

The question of significance of the QS in V1, V2 and V3 during normal conduction is dispelled by the presence of the Q wave in right ventricular leads during infarction. As was pointed out, with uncomplicated RBBB, the septum depolarizes from left to right and the right ventricular registers an initial positivity. The presence of an initial Q wave in right ventricular leads (V1, V2) in RBBB indicates the presence of a complicating infarction.

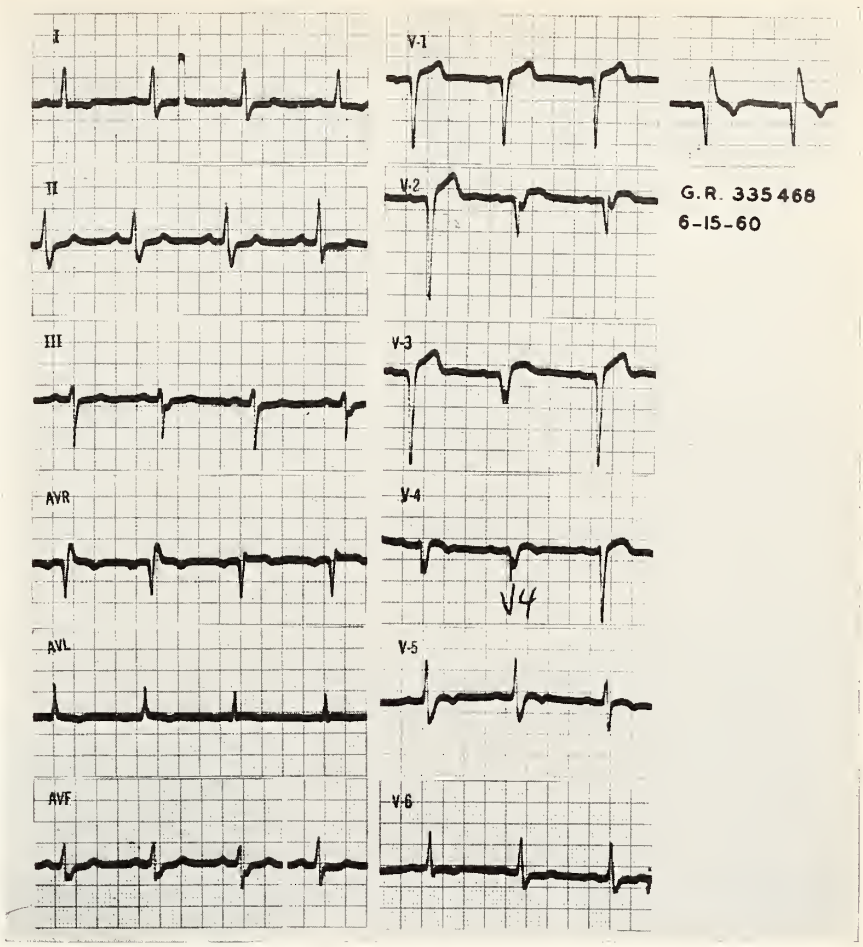


FIGURE 1

THIS TRACING represents an intermittent RBBB with an antero-septal infarction (Q waves in V1, V2, V3).

X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

Trans-hepatic Cholangiography

*ERICH K. LANG, M.D.**
Indianapolis

THIS 62-YEAR-OLD white male was admitted to the Vanderbilt University Hospital because of painless jaundice which had developed during the past three weeks. Liver function tests suggested an obstructive type of jaundice. An upper GI series was carried out but failed to reveal any significant splaying of the C-loop of the duodenum or any other roentgenographic evidence of a lesion in the head of the pancreas.

An oral cholecystogram, as well as an intravenous cholangiogram, failed to visualize the gallbladder and the common duct. A percutaneous trans-hepatic cholangiogram demonstrated a round filling defect in the common duct, most likely representing a large calculus lodged just distal to the cystic duct. Prior to the introduction of the contrast medium, 240 cc.'s of greenish bile had been drained through a 20 gauge needle.

Exploration confirmed the presence of a one and one-half centimeter large calculus lodged in the common duct one centimeter distal to the cystic duct. No other abnormalities were found.

Trans-hepatic percutaneous cholangiography is a safe and definitive examination in a diagnosis of obstructive jaundice. After adequate local anesthesia of the skin is achieved, a 20 gauge thin-walled needle is



NOTE THE PLACEMENT of the needle in one of the radicals of the left hepatic duct. All radicals of the right hepatic duct, the dorsocaudal duct and the gallbladder are well demonstrated. A rounded filling defect is seen in the common duct immediately below the insertion of the cystic duct. This is the classical appearance of a calculus lodged in the common duct resulting in complete obstruction.

* Acting Director of Radiology, Methodist Hospital and Assistant Professor, Vanderbilt University, Nashville, Tenn.

introduced percutaneously into the liver aiming toward the porta hepatis. The needle is then connected to a pliable connecting tube to allow free excursion of the needle with respiration.

The needle is originally inserted to a depth of about two and one-half inches and then gradually withdrawn. As soon as it can be aspirated, at least 100 cc.'s of bile are removed to decompress the distended biliary tree and prevent leakage of bile into the peritoneal cavity after removal of the needle.

Twenty cc.'s of Biligrafin will usually suffice to demonstrate the dilated biliary system all the way to the area of obstruction. If the biliary tree has been adequately decompressed by aspiration of bile, no untoward effects or complications, in particular bile peritonitis, are seen. The method was quite safe in our hands and has been utilized in over 100 successive cases. ◄

Administrative Woes of New Drug Law

Nearly all (pharmaceutical) companies report that their costs have risen. Most of the additional expense is in the areas of research, packaging, labeling, advertising, and in meeting foreign competition.

One company estimates an increase of seven percent in research costs, due exclusively to additional paperwork. Another states it will have to destroy $85,000 in non-complying packaging materials despite every effort to anticipate the regulations and minimize losses. Still another company had to reprint inserts for and repackage 450,000 items already in inventory or actually distributed when, in its judgment, the change demanded was minor, of questionable validity and could just as well have been made effective with new production.

Because of the amount of information now required in advertisements, many companies fear they must now purchase multiple section ads where before smaller ads were sufficient, or give up some of their advertising.

The requirement that the generic name be used every time the trademark is mentioned is anticipated to prove cumbersome and only time will reveal how costly and grotesque in appearance this type of display may prove to be.—Austin Smith, M.D., President, Pharmaceutical Manufacturers Association, to Federal Bar Association meeting, Washington, D. C., June 27, 1963.

The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

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Old Problem Brings New Dilemma

WHAT WE NEED more than new discoveries in medicine is some system to influence people to take advantage of the discoveries that have already been made.

One of the safest and most efficacious immunizations in the book is the active immunization against tetanus by use of tetanus toxoid. It is also one of the least used of the immunizations. The fact that Americans' live boisterous and physically active lives would tend to make it one of the most necessary of all the immunizations.

The prevalence of the Clostridium tetani throughout nature, its tendency to form spores which maintain the ability to infect after surviving long terms of conditions usually inimical to bacteria, and the ease with which clinical tetanus may be acquired by involvement of a wound so slight as to seemingly not warrant a physician's attention, all make the acquisition of active immunity almost a necessity for everyone.

There were 600,000 Americans wounded in World War II. Only one of these developed tetanus. Each year in the United States there are some 400 cases. Immunization of the entire population with tetanus toxoid would not only eliminate practically all clinical tetanus, it would also make unnecessary the dangerous and less effective preventive measure by use of tetanus antitoxin.

It has been demonstrated that tetanus toxoid properly administered and followed by repeated single doses every five years produces a level of immunity many times as effective as that produced by the standard dose of antitoxin.

Despite recent advances in the treatment of clinical tetanus, the death rate remains high and the treatment when successful is complicated and expensive. Americans with their industrial, agricultural and automobile accidents would do well to adopt active immunization on a wholesale scale. It is estimated that about 75% of the population is not immunized.

Active immunization is the only preventive worth considering in the event of an atomic or any other large disaster. With millions of casualties, even if antitoxin was available in adequate amounts, there would not be time to administer it in time to protect so many. In the present state of tetanus immunization, we would lose thousands from tetanus in a large scale disaster.

The American Medical Association has begun a public and professional campaign

of education to acquaint everyone with the importance, safety and advantage of one of the best immunization procedures known to medicine. It is safe and effective and functions equally well with one case or a million.

Guest Editorials

Rising Hospital Costs in Perspective

(To the growing body of literature on the issue of hospital costs has recently been added a lucid analysis by Ernest C. Laetz, a past president of the American Association of Hospital Accountants. In an article entitled "Are Hospital Costs Really High?" which appeared in *Hospital Accounting* (February 1963), Mr. Laetz, Associate Director, University Hospital, Ann Arbor, Michigan, underscores the key factors contributing to the cost of patient care. Excerpts from the article follow.)

IN THE RECENT ISSUE of the *Reader's Digest*, Harold Divelbess, President of the Board of Trustees of Good Samaritan Hospital in Phoenix, Arizona tells the public how to cut everybody's hospital bill in half —simply by eliminating such things as $82,000 Cobalt x-ray machines, $17,000 sterilizers, the $15,000 heart pump machines, surgical microscopes at $2,500 each, linear accelerator at $275,000; the list is endless. He might have added also that employees' salaries be reduced and their hours of work lengthened.

Ridiculous? Obviously! I wouldn't consider it, neither would you!

Such equipment saves lives, shortens hospital stays and reduces the cost of operations in many instances such as the electrically operated bed which the patient can operate, in most cases, without calling the nurse. And yet, equipment like this helps boost today's price of hospital care and, in turn, the premium charge for hospitalization insurance.

But this factor alone does not explain why hospital rates have propelled themselves to the point where, currently, it costs $45 to $50 a day to take care of the average patient, contrasted to 10 years ago at $25 and, unless there is a very significant decrease in the general economic situation, we must expect hospital costs to continue to increase about five percent annually for many years to come.

To better understand the reason for this upward push and to identify hospital costs themselves, let's look behind the operating curtain. Here we see that hospital costs are composed of *salaries and wages, and supplies and equipment.*

The former represents approximately 70% of costs and the latter 30%. This is in contrast to industry where salaries are approximately 28% of cost and 72% for other expenses. *Analyzed, this means that hospitals sell services rather than products.* As all business men know, service usually comes high because its chief ingredient is salaries—not goods. . . .

Whereas industry has been able to absorb increased costs through increased production, there is little opportunity to increase production in hospitals through mechanization, so that every round of salary increases constitutes a direct increase in hospital costs. This statement is not to be construed that no labor saving devices are employed in the hospital. Quite to the contrary; much progress has been made. . . .

At the University Hospital we have installed IBM 305 RAMAC equipment which is currently used to post patient accounts at tremendous speed. It will give a patient's balance at any given moment, separating the patient charges from the insurance coverage he carries. As further applications are put on this electronic data processing equipment, it is expected to result in a saving of eleven clerks.

Nevertheless, hospital wages lag behind industry. If hospitals are to get the quality of worker so vital to maintaining the health of the community, wages must rise further and faster to match and be competitive to that of industry. No longer do we find ded-

icated people in the hospital who are willing to work for sub-standard wages.

Reprinted from *Health Insurance Viewpoints*, Vol. III, No. 2, Sept., 1963.

"The Light That Failed"—in Britain

BRITAIN'S ELECTRIC UTILITIES have been government-owned and operated for years—and how does the English public fare? On February 5, the *Evening Standard* of London said this in its daily lead editorial:

> "During the worst days of Britain's big freeze, when towns became benighted, work disrupted, lives endangered, by the capricious behaviour of essential services, this newspaper considered that the performance of the great utility boards had amounted to a national scandal, and said so.
>
> "Many wrote in support of this charge, but some defended the boards. And the gist of their defense was that no one can expect those who supply the nation with gas, water, coal and electricity, to maintain a sufficient margin of safety to cope with freak weather conditions.
>
> "An article in the *Financial Times* today by Mr. Harold Wincott shows how feeble such excuses are, and how desperately badly the electricity industry, for one, is coping with the needs of an expanding economy.
>
> "No comparison is more damning than that which Mr. Wincott makes between the readiness of our power supply to deal with emergencies and that of the Americans, whose private enterprise electricity industry has a permanent excess capacity represented by a safety margin of more than 30%.
>
> "But this is only a symptom of a fundamental sleeping sickness in our nationalised electricity industry. Privately owned electricity in the U.S. puts up an incomparably better performance. 'In the ultimate,' writes Mr. Wincott, 'our nationalised labour force in electricity is less than a third productive as America's private enterprise labour force. If we achieve their standards of productivity, we should need not 200,000 workers in this industry but 60,000.'
>
> "More efficient, more ambitious, more productive American electricity has fallen in price since the end of the war, whereas ours has become more expensive."

The article in the *Financial Times* by Harold Wincott, noted economist, under the title "The Light That Failed" said this in part:

> "As you contemplate your electricity bills, you ought to remember that America's private enterprise industry pays much heavier taxes than our nationalised industry does, and has to service all the capital it raises and pay dividends to its shareholders. . . . Here [*in Britain*] we have a highly organised industry in a small densely populated country. If ever our nationalisation ought to be able to deliver the goods, it is surely in our electricity industry. Manifestly, it hasn't."

Editorial Notes . . .

Automotive Crash Injury Research of Cornell University has utilized their detailed injury reports on more than 60,000 injured persons in over 30,000 cars in accidents to determine the effect of instrument panel padding. They were able to match accidents as to same make of car, same model, same impact directions and speed, and same age, sex, weight of the passengers, so as to make up 792 pairs of persons occupying either the right-front or center-front seat. Head injuries were affected more than any other anatomical part injury. Minor head injuries were affected the most by padding —about one-quarter less frequently for both seats tested in a padded car. The center-front occupant enjoyed considerably more advantage in minor head injuries. As the severity of the injury increased, the advantage of padding was less.

Can narcotic addicts be cured by an ambulatory method which includes decreasing doses of narcotics, rehabilitation measures and psychiatric help? Two pilot projects are being sponsored by the National Association for the Prevention of Addiction to Narcotics (NAPAN). The treatment will be carried out, according to present plans, at two major medical centers, under the strictest controls and with close cooperation of law enforcement officials. The subject has been the object of controversy but is in line with the recent AMA stand on treatment of addicts.

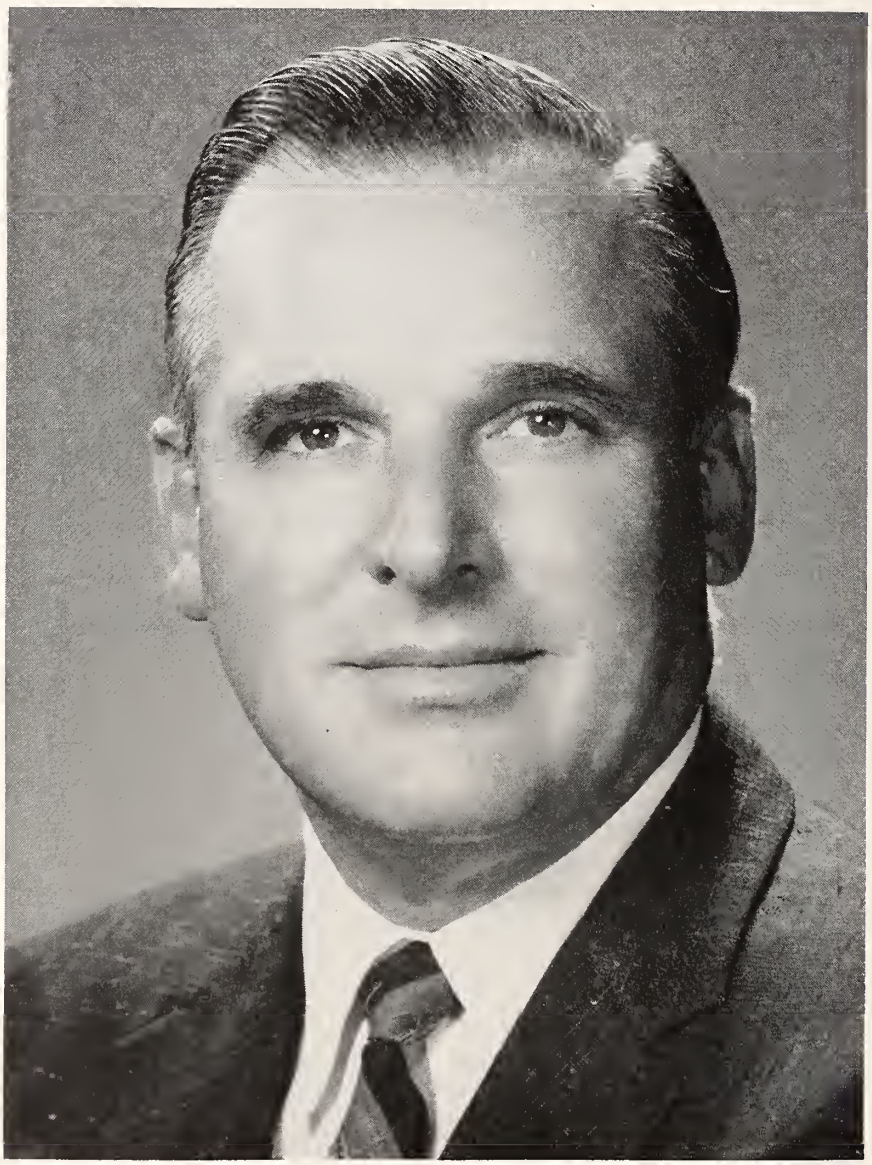
The Veterans Administration hospital system is becoming the largest training ground for students in the medical field. Seventy-eight of the nation's 87 medical schools are affiliated with 89 VA hospitals. Last year 8,464 students, 3,001 medical residents, 3,441 nursing students, and other technicians and students to a grand total of 17,860, obtained part of their training in a VA hospital. In fact one-half of all new physicians being produced in the U. S. now receive part of their training in VA medical facilities.

Smith Kline & French Foreign Fellowships for Medical Students will be awarded again next year. Approximately 30 students will be afforded an opportunity to assist and observe physicians for 10 weeks at rural medical stations in remote and underdeveloped areas overseas. In the past four years, 123 students have worked in 40 foreign countries under the SK&F Fellowships.

Box score on major medical insurance—still the fastest growing medical expense insurance. Forty million are now covered. Indiana has 1,052,000 persons covered. Major medical benefits paid out in 1962 were 20% above those of 1961, and in 1963 benefits are running 16% ahead of 1962. Major medical started in 1949 and by the end of 1951 had only 108,000 people signed up. It is truly the hottest thing in health insurance.

The Humble Oil Company has performed an outstanding public service by publishing a booklet which describes and gives first-aid information on the approximately 5,000 products which it sells to the public. Poison control centers have all been furnished a copy of the booklet. The idea started with J. W. Hammond, the company's chief industrial hygienist, and was developed with the help of the Humble medical staff assisted by outside experts.

Measles vaccine is so effective that a considerable quantity of gamma globulin has been released for other uses. One of the recommended uses is the prevention of serum hepatitis after transfusion. The mortality of hepatitis in persons over 40 years of age is about 1 death per 150 transfusions. Two doses of globulin after a transfusion will prevent hepatitis in three-fourths of the cases. A *JAMA* editorial advises consideration of the routine administration of gamma globulin to all persons over 40 if they are transfused. ◄



DONALD E. WOOD, M.D.

President

Indiana State Medical Association

1963-64

Dr. Donald E. Wood commenced his term as president of the Indiana State Medical Association on October 16 when he received the president's gavel from Dr. Maurice Glock at the Columbia Club.

Dr. Wood was born in Terre Haute, he attended Indiana University Medical School and graduated in 1935. He served his internship and residency at Indianapolis General. He has practiced internal medicine in Indianapolis since 1938 except for the period he spent in France with the 32nd General Hospital in World War II.

Dr. Wood, a widower, recently married Mrs. Betty Fairchild of Indianapolis. He has two sons, David, an engineer, who was graduated from Michigan and is presently completing his work on his Ph.D. at Ann Arbor. His youngest son, Joe, was awarded a Rhodes Scholarship and is studying at Oxford University in England.

Dr. Wood has taken a very active part in the affairs of the state Association and has held office on many committees since 1938. He has been a member of the executive committee since 1957 and served as its chairman from 1960 through 1962.

Currently Dr. Wood is a member of the legislation commission of ISMA, the legislative council of the AMA, chairman of the board of AMPAC and a board member of I-HOPE.

Dr. Wood is also president of the Marion County Medical Society, which office he will hold until January, 1964.

Dr. Wood is on the staff of Methodist, St. Vincent's and Community hospitals and is also on the staff of the Indiana University hospitals. He is Assistant Professor of Medicine at I. U. School of Medicine and Chairman of the Department of Medical Economics and Postgraduate Education.

Dr. Wood brings to the office of president many years of experience and dedicated service to the Association. His watchword to the members of ISMA for the coming year is "1964 must be the year of action."

President's Page

OUR GROWING CHALLENGE

It certainly is a wonderful pleasure for me, as you know, to assume the job as president of this organization. To me it offers a great challenge and I think we must have a definite program. I hope that we can do as well as Dr. Glock did in his year's activities.

But the program that I have outlined—which you have outlined really—is I think a very forward looking program and one in which we can show our interest in the health of the citizens of our state and our local communities. The first one and I feel, the foremost one, has to do with our program in mental health. This is going to be the program on which we are going to place the greatest emphasis. As you know, we have forthcoming in the next few weeks, six regional programs and I hope you all will participate and give impetus in your locality.



Our next program is that of the improvement of medical care in our correctional institutions. We should also study definitely an intensified program for the home care of the aged. As you know, we are going to have a state meeting in November along these lines.

We should study also a fuller immunization program for our school-age children.

I think we also are going to expand our loan program for medical students.

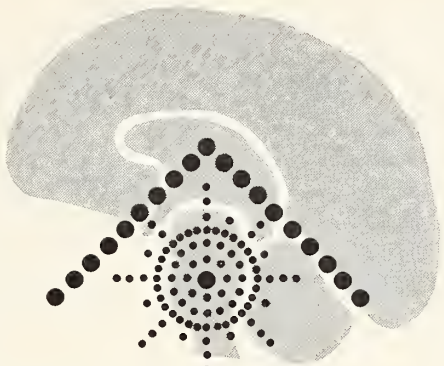
Another new program in which I would like your help is in the high school debate program. The subject this next year is going to be "Medical Care for the Aged." I think this is one program that you can do a great deal of good in by giving information and counsel to those students who come to you for this help.

As you know, next year is an election year. Of course we want to be active in the field of legislation and participate in the party of our choice.

The next one that I think we need to investigate is the problem of narcotics. We will have to hear a lot about that throughout the year.

Finally the study that we are making of the voluntary health agencies will be intensified. As you know, the commission has been doing a fine job in this field and has presented testimony to our House of Delegates of the AMA. So I do think that we have a great challenge facing us and I am asking for your help.

Donald E. Hood



in visceral motor disorders...

EASIER MANAGEMENT

When emotional disturbance is a significant factor in dysfunction of gastrointestinal tone, motility and secretion, Pro-Banthīne with Phenobarbital provides the dual activity that leads to easier management of both the patient and his problem:

Pro-Banthīne (propantheline bromide) to neutralize the effect of excitatory impulses at visceral end organs, *and*

Phenobarbital to moderate emotional incitement centrally.

Pro-Banthīne with Phenobarbital is indicated when a mild to a moderate psychic element is a factor in: Peptic ulcer • Biliary dyskinesia • Pylorospasm • Intestinal hypermotility • Spastic colon • Gastritis • Other dysfunctions of the gastrointestinal tract.

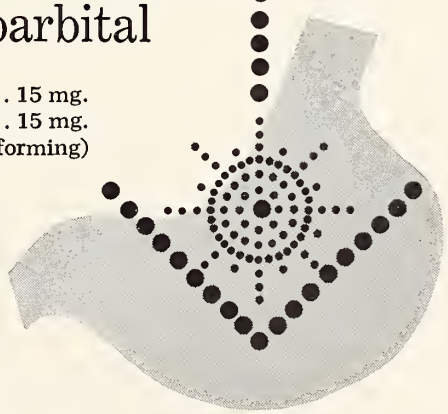
Dosage: One tablet four times a day.

Urinary hesitancy, xerostomia, mydriasis and, theoretically, a curare-like action might occur with Pro-Banthīne (brand of propantheline bromide). It is contraindicated in the presence of glaucoma or severe cardiac disease. The usual precautions with regard to phenobarbital should be taken.

G. D. SEARLE & CO.
CHICAGO 80, ILLINOIS
Research in the Service of Medicine

PRO-BANTHĪNE®
with Phenobarbital

Each tablet contains:
propantheline bromide .. 15 mg.
phenobarbital 15 mg.
(Warning: May be habit forming)



The Woman's Auxiliary

REPORTS TO ISMA

The state officers and committee chairmen went traveling on September 10th, 11th and 12th to present the auxiliary program to the county organizations. Twenty-two officers and committee chairmen participated in this three-day event, and many of them took time from home and family to attend all three meetings.

The purpose of the Area Workshops is to promote, stimulate and help the county auxiliaries with the program for the year. The entire program was presented. It is imperative that each auxiliary know the auxiliary program in its entirety, although many of them may choose only those projects that best suit their membership and the needs of a particular community. Over 60% of the auxiliaries were represented at the three meetings. The interest and enthusiasm manifested by the questions asked of the state chairmen proved the meetings successful.



The second vice-president, Mrs. Perrie Q. Row, presided at the morning session at Wabash; the fourth vice-president, Mrs. Kenneth Schneider at the ISMA Building, Indianapolis; and Mrs. Alfred B. Scales, third vice-president at French Lick.

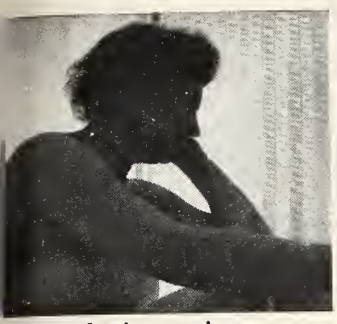
The afternoon sessions were conducted by Mrs. Thomas Johnson, Auxiliary Liaison to I-HOPE and Mrs. Frank Gastineau, member of the Board of Directors of I-HOPE and AMPAC. AMPAC's political education film, the "Barnstormer" was shown. This is a two-hour film, and the members commented that the information received was worth every minute of viewing time. Many inquiries were made as to the availability of the film for showing in the counties in order that all members and their husbands could view it.

The Board of Directors of I-HOPE has asked the auxiliary to take the initiative in arranging joint meetings (auxiliary and society) on the county level at which time the film would be shown. Letters have been sent by Mrs. Thomas Johnson, to the county auxiliary presidents urging active participation in this educational program.

I quote from a speech made by Edward R. Annis, M.D., AMA President, at the national convention last June, "This country is threatened with a foreign philosophy which has invaded our shores. You and I had best become interested—as members of the profession, but more important as citizens—not as Democrats or Republicans or Northerners or Southerners or Conservatives or Liberals—but as citizens of these United States."

May we be thankful on this coming Thanksgiving day that time remains to do those things that will insure a heritage for which future generations can give thanks.

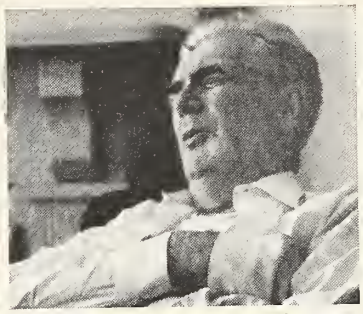
Zelda K. Sullivan



The insomniac



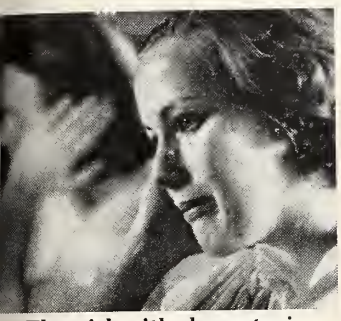
The tense, nervous patient



The heart-disease patient



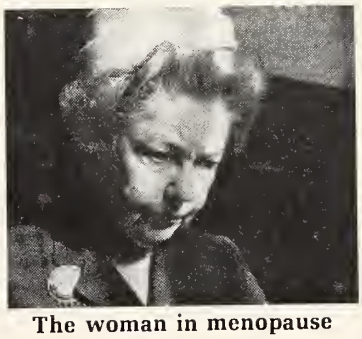
The surgical patient



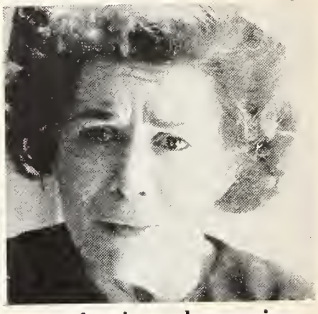
The girl with dermatosis



Tension headache



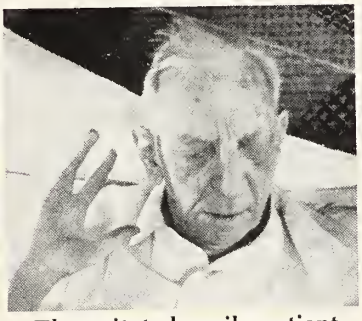
The woman in menopause



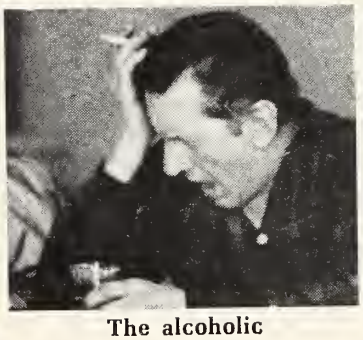
Anxious depression



Premenstrual tension



The agitated senile patient



The alcoholic



The problem child

the original brand of meprobamate

Miltown®



The G.I. patient

WALLACE LABORATORIES
Cranbury, N.J.

TAX TIPS

Summary of the 1963 Indiana Adjusted Gross Income Tax

The following interpretations will be adhered to and applied until changed or rescinded by the department of revenue or until replaced by an official regulation or nullified by court decision or official opinion of the Attorney General.

THE ADJUSTED GROSS Income Tax Act of 1963, enacted by the 93rd General Assembly, imposes a tax on the adjusted gross income of individuals, trusts, estates and corporations. In many respects the law is closely related to the Internal Revenue Code of 1954, as amended and in effect on January 1, 1963. Many of the federal definitions are adopted, as are all of the pertinent federal regulations until such time as the Indiana Department of State Revenue promulgates its own regulations.

Individuals

Adjusted gross income is gross income less allowable deductions, which include certain costs of earning the income. However, in arriving at adjusted gross income for state tax purposes, the taxpayer must add to his federal adjusted gross income any amount he deducted for state and local taxes paid, including property taxes.

Joint return—Taxpayers who are married couples and who file a joint federal tax return must also file a joint state return.

Personal exemption—Where a joint return is filed, each spouse will be entitled to a personal exemption of $1,000 or less if his income is less than $1,000, but in no case will the exemption be less than $500 for each spouse. A $500 exemption is allowed for each dependent. Either spouse who is blind and/or over 65 years old is entitled to an additional $500 exemption for blindness and/or additional $500 for being over 65 years of age.

An individual taxpayer filing a separate return is entitled to a personal exemption of $1,000 for himself, plus $500 for each of his dependents (not including his spouse).

Filing date—If the taxpayer files on a calendar year basis, his tax return will be due on April 15.

Declaration—If the taxpayer is required under the Internal Revenue Code to file a declaration of estimated tax and pay such tax in installments, he will be required to do the same for the state tax.

Withholding—The statute requires employers of one or more employees to withhold the tax from the wages they pay to their employees with the exception of domestic or agricultural workers, and casual laborers not employed in the course of the employer's business as defined by the Internal Revenue Code.

The Indiana Department of Revenue has prepared, and has distributed to employers, new withholding tables showing the rates at which the tax is to be withheld. All exemptions are listed for the various pay periods with the exception of zero exemptions in which case a full two percent will be withheld from the gross pay of such employee.

Employers who have not yet received tables should notify the department and a copy will be sent at once. The department will accept the same withholding information as given for federal purposes and for the present will not issue exemption forms for employees to fill out.

Who must file—Persons, as defined in the Act, who are subject to tax under the adjusted gross income tax act will *not* be subject to tax under the gross income tax act after July 1, 1963.

Corporations

Adjusted gross income for corporations is taxable income as defined in Section 63

Continued

Colds haven't changed— but relief has with NTz® NASAL SPRAY

NTz Nasal Spray gives on-the-spot relief for stopped-up noses instantly. Recommended by doctors for 10 years, it provides not one, but three powerful ways to fast relief.

In a carefully balanced formula, NTz contains:

Neo-Synephrine® HCl to shrink swollen nasal tissues and provide enough space for breathing

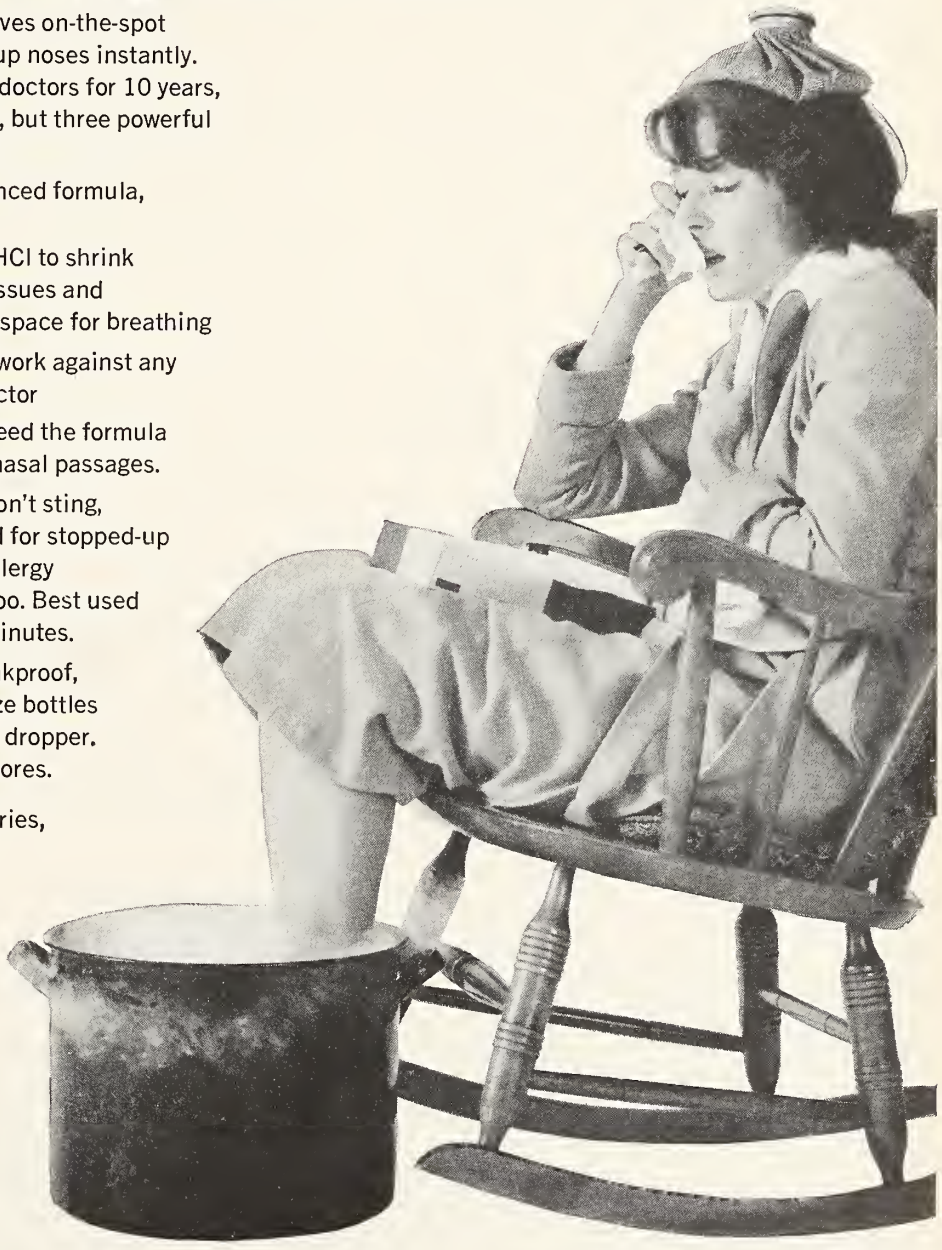
Thenfadil® HCl to work against any local allergic factor

Zephiran® Cl to speed the formula through **all** the nasal passages.

NTz Nasal Spray won't sting, won't irritate. Good for stopped-up noses caused by allergy and for sinusitis, too. Best used **twice** within five minutes.

NTz supplied in leakproof, pocket-size squeeze bottles and in bottles with dropper. Sold only in drugstores.

Winthrop Laboratories, New York 18, N. Y.



Winthrop

NTz, Neo-Synephrine (brand of phenylephrine), Thenfadil (brand of thenyldiamine) and Zephiran (brand of benzalkonium, as chloride, refined), trademarks reg. U. S. Pat. Off.

GROSS TAX

Continued

of the Internal Revenue Code, meaning gross receipts less all ordinary and necessary business expenses. However, corporations must include any amounts deducted on their federal tax return for state and local taxes and for charitable contributions.

When to file—Corporate returns, like those of individuals, are due on the 15th day of the fourth month following the close of the taxable year.

Computing tax—Unlike individuals, corporations will continue to be subject to tax under the Gross Income Tax Act at a one-third increase in rate, since the 1963 General Assembly increased the gross income tax rates from three-eighths percent to one-half percent, and from one and one-half percent to two percent by amendment to the Gross Income Tax Act. However, in computing its adjusted gross income tax liability, a corporation is required to compute its liability under the Gross Income Tax Act, and under the Adjusted Gross Income Tax Act and to pay the larger of the two amounts.

Exempt corporations—Certain corporations are not subject to the adjusted gross income tax. These include charitable corporations exempt from federal income taxes, banks and trust companies, national banking associations, mutual savings banks, private banks, and certain insurance companies.

Partnership election—Corporations with ten or fewer shareholders which have elected under section 1372(b) (1) of the Internal Revenue Code (Subchapter S), to be taxed as a partnership (provided that all of the shareholders are residents of the state of Indiana) will not be subject to tax, but the shareholders will be taxed, as individuals, under the Adjusted Gross Income Tax Act, on their distributive share of the corporation's income. However, the election must be made with the Federal Internal Revenue Service before it can be accepted by the Indiana Department of Revenue.

Allocation of income—If a corporation or a non-resident individual has income from sources both within and without the state of Indiana, and the income from sources within the state cannot be separated from



that derived from sources without the state, the taxpayer must allocate its income by means of a three-factor formula. The fraction to be applied to the taxpayer's adjusted gross income in order to determine what part of that income is taxable by the state of Indiana is determined by taking the average of the three following fractions:

1. Total value of taxpayer's real and tangible personal property owned or rented and used in this state during the taxable year.
 Total value of *all* of taxpayer's real and tangible personal property owned or rented and used.
2. Compensation paid by the taxpayer in this state *during the taxable year.*
 Total compensation paid by the taxpayer during the taxable year.
3. Total sales of the taxpayer in this state during the taxable year.
 Total sales of the taxpayer everywhere during the taxable year.

If this allocation formula does not fairly represent the amount of the taxpayer's income derived from sources within the state, the taxpayer may petition for, or the Indiana Department of Revenue may require, that some other formula or method of allocation be used.

Partnerships

Partnerships, in the judgment of the Department, are not subject to tax under the Adjusted Gross Income Tax Act. They will, however, file an information return, as they do under the Internal Revenue Code, and the partners will be taxable as individuals under the Adjusted Gross Income Tax Act on their distributive share of the partnership income.

Miscellaneous

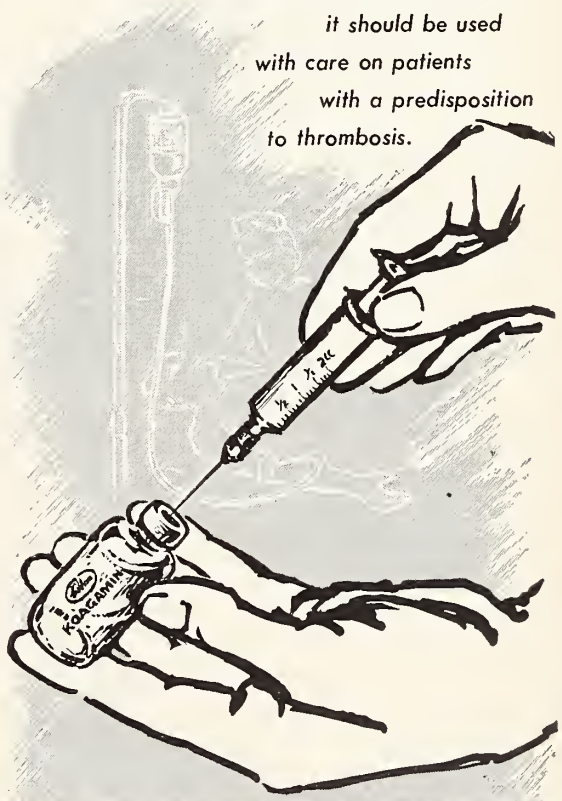
The Adjusted Gross Income Tax Act will be administered by the Indiana Department of Revenue and many of the administrative procedures in the Gross Income Tax Act respecting assessment and collection have been incorporated in the Adjusted Gross Income Tax Act. ◄

James C. Courtney, Commissioner
Indiana Department of Revenue

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Some of the thoughts and facts contained in this speech must be considered as a warning that nationalized medicine with all its pitfalls can happen here unless everybody takes an active part in the fight for "Freedom in Medicine."

The Writing on the Wall . . . In Neon Lights*

I HAVE ALWAYS admired the fact that over the years since the Fellowship was started, you have refused to accept the belief that the National Health Service was a divine gift, brought down from on high with a crack of thunder and a blaze of forked lightning by Aneurin Bevan.

The title I suggested for my talk tonight was "The Pathogenesis of the National Health Service." This means approximately the growth of a symptoms of a disease. Now it is a very contentious statement in itself to say that the National Health Service is a disease; but of diseases there are bad ones and not so bad ones. I think that the N.H.S. is a disease, but not a very bad one. Frankly, I think that we could make it a much better one.

The famous columnist Crossbow said in 1959 about the N.H.S.: "This child, conceived after the inadequacies of the '30's and the social maelstrom of the war, born in strife and struggle 11 years ago, passing its infancy in bitterness and backbiting and moving now into an adolescence of disillusionment and frustration." This, to my mind, summarizes the clinical state of the N.H.S. at the present time, and it is from that point that I want to look back briefly to its beginnings and to look forward to what we can do constructively to cure this disillusionment and frustration.

I am, and I trust that most of you here are, genuine and honest believers in the ideal of *a* National Health Service. I believe that is a conception which is worth following up, but that it is quite a different conception to *the* National Health Service, and I would like to make that point very clear.

When the N.H.S. originally got into the hands of the politicians, it was known that it was an all-party interest, largely influenced in fact by those on the Right. The tragedy was the fact that it was floated precipitously by *one* party. It was floated in an arbitrary way without due thought, without consultation, with the profession, and was, in fact, if we are honest, floated without the agreement of the profession.

That, to my mind, is the sad part of it, because from that moment on, a magnificent ideal became in fact power politics, party politics. This wonderful, magnificent thought of health for the whole population became a political shuttlecock.

The Ministry, which had to be initiated to start off working this brand new conception of a health service, was completely unprepared, completely untutored, absolutely uneducated in how to deal with a problem that had never been dealt with by the Government before. It was a first-class Civil Service machinery, as our Civil Service is first-class, but it had no experience, no training, no hope of knowing the jargon which was thrown at it within a matter of weeks or, certainly, not very many months.

The politicians and ourselves were both at fault. At the beginning we were a coerced profession, brought into the service without due knowledge and rather against

Continued

* Excerpts from a speech given by Sir Arthur Porritt, Bt., K.C.M.G., K.C.V.O., C.B.E., M.Ch., P.R.C.S. This speech was given at the annual dinner meeting of the *Fellowship for Freedom in Medicine*, in London, May 1st, 1963.



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SIDE EFFECTS: Insomnia, excitability and increased motor activity are infrequent and ordinarily mild.

CAUTIONS: Use with caution in patients hypersensitive to sympathomimetics or barbiturates and in coronary or cardiovascular disease or severe hypertension. Excessive use of the amphetamines by unstable individuals may result in a psychological dependence; in these rare instances withdrawal of medication is recommended. It is generally recognized that in pregnant patients all medications should be used cautiously, especially in the first trimester.

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our will. We started disgruntled. The net result was that during the first four or five years of the National Health Service, the profession did nothing but argue about the mercenary financial side of its commitments, and so the whole atmosphere at the beginning was wrong.

It was the most tragic thing that ever happened to a big ideal, but I believe that it is very essential if we are going to get anything out of this discussion that we should appreciate the initial mistakes of the setting up of the National Health Service. This antagonistic atmosphere of the first few years unfortunately has not ceased to exist.

A medico-political curtain, just as positive, just as definite as any iron curtain or bamboo curtain, or any other kind of curtain, exists now. That is a tragedy, because there is not the faintest doubt in my mind that both parties (the profession and the politicians) are wanting to do a job for the people and for their patients.

Look back for a moment to the beginning of the service widely boosted as a *comprehensive* National Health Service. It has never been comprehensive and it never will be comprehensive until we become a totalitarian state, which God forbid.

A Great Idea Gone Awry

It should be, as was stated in the original discussions of the Act, as far as possible decentralized, so that the people at the periphery and the people at the end, the serving end as well as the receiving end, of the service would have an interest in the service. What has happened is more and more centralization and more and more red tape.

If there is one way in which our profession is going to develop in the future into something worthwhile, it is going to be on the preventive side and not on the curative side. The stress which was put on to the hospital side was unfortunate from the start. Worst of all, the most machiavellian thing was what that very excellent Minister of Health, Aneurin Bevan, did; he divided the service into three parts—the Family Doctor Service, the Hospital Service and the Public Health Service, and it appears that nothing shall join them up.

One of the initial vague ideas was that this was a service which would be of great value to the indigent. How many indigent people are there in this country now, 15 years later? I would suggest very, very few, and yet the Act is founded on doing good to the indigent. Now let us have no doubts, the Health Service has undoubtedly done much good—in places. It has done its best, but its best is far from good enough, and that is the position today. Its policy has become complacent and no good medicine can be complacent; it must provide individual attention. Medicine is not a matter of figures, it is a matter of people.

The chief factor that has made development so difficult is this lack of understanding and lack of co-operation between the two essential parties concerned, the politicians who took it over and the profession who run it. A first-class profession has gone on working under conditions it does not like and has nevertheless done a first-class job.

I do not want anyone to think that I am disparaging the Ministry, or the Minister, or politicians in general. What I am saying is that a great idea went awry and we must try to get it back.

We as a profession were involved for many years in what I can only consider to be unseemly financial bickering; then, to our great credit and to the Ministry's credit, we have achieved a Review Body in an endeavor to put these things in an entirely independent sphere. What then happens? The profession goes back and starts bickering again. We are one profession, and the bickering between us is not seemly and does us no good at all. After getting the Review Body's answer, we immediately start out to find a new difference in a much lower range.

A Profession Without Vision

We are also an apathetic profession. This does not mean you, within the Fellowship, but you are a very small minority. The majority of our profession is entirely apathetic, and what it gets, it largely deserves. We have been, in other words, a

profession very largely without vision. We have been too concerned with our vested interests and with our respective little bits of our profession and we have not seen the sense of getting together to be a co-operative force. As a profession, we have lost our confidence in ourselves. That may sound a terrible thing to say. I do not believe for one moment that the Fellowship for Freedom in Medicine has lost confidence in itself but, as doctors we have, and as voters we are such a miserable minority that our effect upon the Government is nil.

We are short of hospitals. The taking over, lock, stock and barrel, of those nice old hospitals was the greatest act of confiscation which has happened since Henry VIII took over the monasteries.* We are short of beds; we are short of doctors, we are short of nurses, we are short of equipment. Research is very indifferently looked after. The G.P.'s are by no means happy, neither with the amount of work which they have got to do nor the conditions under which they do it, nor with the amount of pay which they get nor the way they get it. The Medical Officer of Health is disgruntled. In a great many places he feels himself almost ostracized. The Local Authorities have taken unto themselves more and more activities and now the Government is going to subsidize the Local Authorities. It is an interesting position for the medical profession.

* * *

Why are we failing? For one reason, the Service is incredibly expensive and is getting more and more so every year it goes on. Yet we who realize this cannot get any reaction whatsoever to the suggestion that there are other means of paying for the medical services in this country which might run parallel to, but in no way destroy, the ideal of an N.H.S., and in fact make it possible to do more. ◄

* The Ministry of Health's Ten Year Plan for Hospital Building. This plan includes the elimination of more than 1,200 small hospitals. Staffed by family doctors they provide valuable services in their districts, both in town and country.

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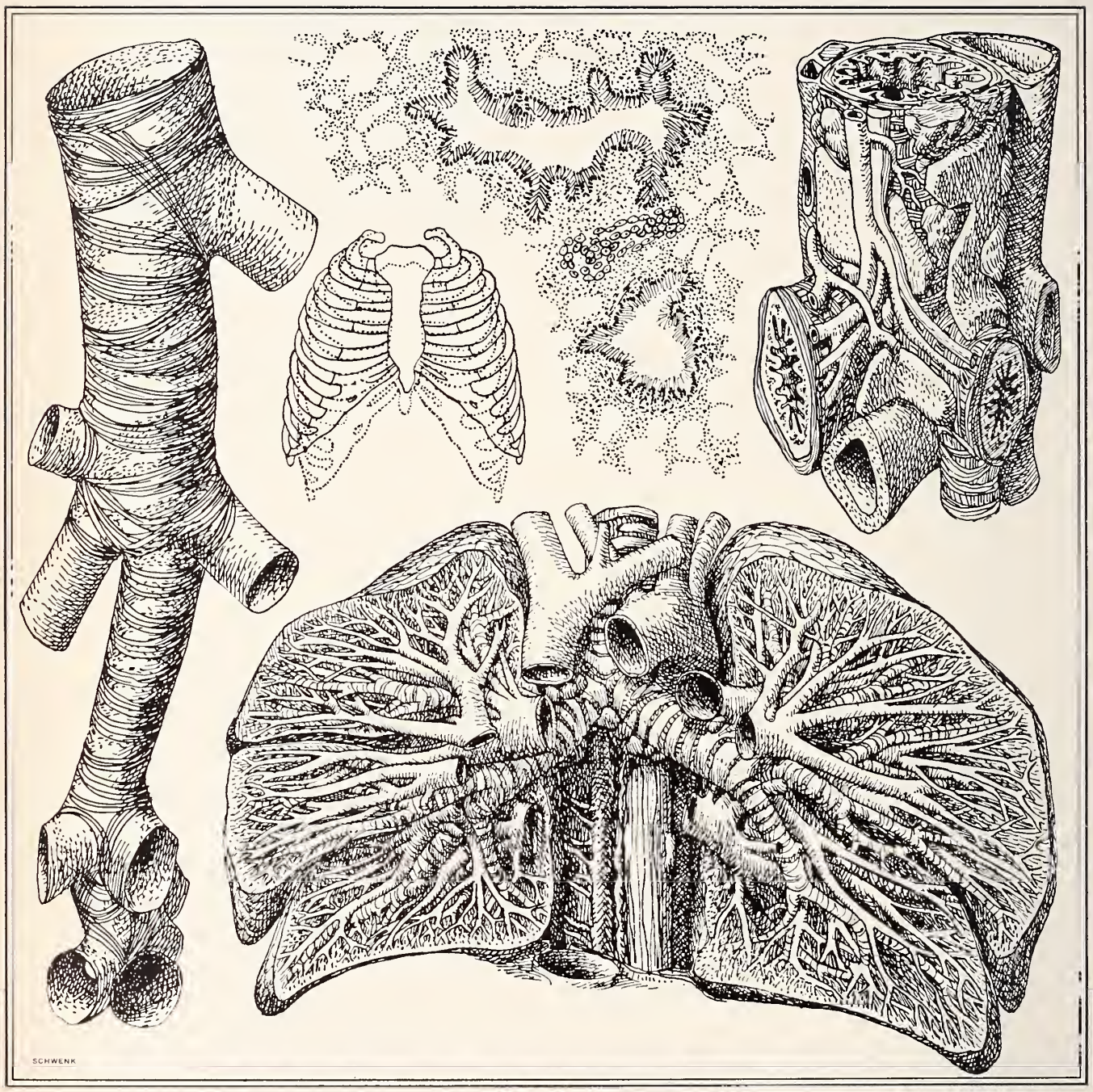
Pentaerythritol tetranitrate may infrequently cause nausea and mild headache, usually transient. Slight drowsiness may occur with meprobamate and, rarely, allergic reactions. Meprobamate may increase effects of excessive alcohol. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction. Like all nitrate-containing drugs, 'Miltrate' should be given with caution in glaucoma.

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Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Proceedings Revoking Doctor's License Upheld—A doctor's license to practice medicine was revoked after a Board of Regents committee found that he had submitted false and exaggerated medical bills and reports to attorneys for use in obtaining settlements from insurance companies. The doctor requested a New York court to review the revocation proceedings, claiming that the committee had prejudged the case and failed to give it proper consideration, since the committee's decision was dated the same day as the hearing.

In the absence of evidence supporting the doctor's contention that the decision was arbitrary and without due process, the regularity of the proceedings must be presumed, the court said. Moreover, an affidavit by a member of the committee stated that a record of proceedings before a subcommittee had been submitted to the committee more than a month before the hearing, and that the decision had been made more than three days after the hearing, although it was the practice to use the hearing date as the date of decision.

Werter v. Board of Regents of University of State of New York, 238 N. Y. 2d 356 (N. Y., March 13, 1963).

Doctor Liable for Postoperative Neglect Resulting in Death—In a wrongful death action, judgment against a doctor for negligence in the care of a patient following partial gastrectomy and jejunostomy was affirmed. The doctor had not visited the patient until almost 12 hours after receiving notice that the patient was in profound shock. The appeals court ruled that the evidence raised a jury question as to whether death resulted from malpractice.

Upon the advice of another physician, the patient had been admitted to the hospital under the supervision of the doctor. The doctor, in consultation with his brother, also a physician at the hospital, diagnosed the condition as a penetrating duodenal cap ulcer and advised a partial gastrectomy and jejunostomy. The operation was performed by the doctor's brother, but the doctor took charge of postoperative care. A postoperative laboratory report showed no evidence of an ulcer and diagnosed the condition as acute gastritis.

The operating physician had ordered the Levine tube removed three days after the operation, and the doctor in charge did not change the instructions, even though he knew that the patient was hemorrhaging and had gone into postoperative shock after removal of the tube. Five days after the operation, the doctor was notified that an emergency existed and that the patient had gone into profound shock. However, he did not visit the patient until almost 12 hours later.

On the following day, the patient was removed, at the request of his family, to another hospital and was placed in the care of another physician. The other physician believed that drainage of the abdomen was indicated but that such treatment was impossible because the patient was dying. He stated that the patient died as a result of the surgery and further complications which created a state of shock from prolonged peritonitis, all resulting from a leak-

ing of the duodenal stump. Another doctor testified that the duodenal stump had distended and apparently ruptured, that the patient had apparently suffered perforation of the duodenum and extensive hemorrhage, which caused his death, and that closer observation at an earlier time would have afforded a better chance for survival.

In upholding the lower court's refusal to submit to the jury interrogatories requested by the doctor, the court said that customary methods and practices generally employed by physicians and surgeons in the diagnosis and treatment of a patient are not controlling on the question of negligence, although they may be considered along with other circumstances. Proof that the doctor had met the recognized standards of medical practice in the community would not necessarily absolve him of negligence.

Although the doctor's brother and the hospital were also named as parties to the suit, the jury's verdict was in favor of those two defendants. The appeals court affirmed the lower court's ruling that the plaintiff was not required to elect to proceed against either the doctor's brother as principal or the doctor as agent of his brother, since both took part in the diagnosis and treatment of the case. A companion case for pain and suffering of the patient resulted in a verdict for all three defendants.

Morgan v. Sheppard, 188 N. E. 2d 808 (Ohio, March 7, 1963).

Jury Deadlocked in Glaucoma Case—A patient's suit against an ophthalmologist ended with the jury deadlocked 11 to 1 in favor of the doctor. The patient had asked for $85,000 damages, claiming that glaucoma was caused by mydriatic put in his eyes to dilate his pupils. He said that he suffered pain the next day after receiving the eye drops. The doctor said that the patient had glaucoma in one eye prior to the examination. An offer of a settlement for $3,500 was refused by the patient.

Schneider v. Skowran, Cir. Ct. of Cook Co., 58C-9974 (Ill., May 27, 1963). ◄

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Report to House of Delegates

(One of a series prepared by Blue Cross-Blue Shield)

(Extracts from the report made to the House of Delegates of ISMA on October 14, 1963, by Glen V. Ryan, M.D., President of Indiana Blue Shield.)

"Indiana Blue Shield was organized by the Indiana State Medical Association to help our patients prepay their medical bills. As a community service organization, we measure our success not in earnings per dollar of capital, but in the number and extent of benefits provided our membership. On that basis, 1962 was our best year ever.

"A total of $20,721,436 was paid for members' medical bills during the year, the largest amount paid out in any one year since the plan was organized. The pay-out for 1961 was $17,957,496. Since organization in 1946, Indiana Blue Shield has now paid to physicians a grand total of more than 140 million dollars.

"The number of claims for the year was also the largest ever, totaling 587,213. The comparable 1961 total was 514,991.

"Our membership showed a net gain of 38,419 for the year, and as of December 31, 1962 totaled 1,469,670 members and dependents—an all-time high. This membership gain—in a highly competitive situation and despite all the talk about Medicare—is a strong demonstration that the public is aware that our plan provides the best protection for the member's dollar.

"Our operating percent in 1962 was the lowest in our history, amounting to 7.2% of income. This compares favorably with the 9.0% of income operating expense reported for all 75 Blue Shield plans in 1962 as a national average.

"Income from membership fees increased from $19,303,696 in 1961 to $23,192,565 in 1962, and total assets at the end of the year were at an all-time high of $11,939,313.

"Emphasis during the year continued to be placed upon the sale of broader benefits. Every effort was made to sell new accounts and convert old accounts to benefits paralleling good medical practice. We know that if our patients do not have adequate prepayment coverage they will look to the Government for help. If a benefit program is too limited, or the allowance too meager, our patients will become more and more interested in Medicare as a solution to their problems.

"Our sales effort in the area of broader benefits was highly successful and at the end of 1962 the situation was the best ever. There was a marked decrease in standard surgical and medical, and an increase in preferred and special surgical and medical, intensive care and diagnostic x-ray and pathological services.

"The number of Blue Shield members with standard surgical was decreased from 928,850 in 1958 to 696,278 in 1962. The number protected by preferred or special surgical was increased from 377,331 to 773,392 during the same period. The net gain for 1962 in broader coverage was more than 120,000.

"Standard in-hospital medical was decreased from 873,563 to 687,998, and preferred and special in-hospital medical was increased from 263,094 to 669,481 during the period from 1958 to 1962. The net gain for 1962 was more than 125,000. Incidentally, over 173,000 people are now covered by programs based on ISMA's resolution No. 26.

"The new intensive care coverage was held by 158,263 at the end of 1962 and the diagnostic x-ray and pathology services was increased from 44,223 in 1958 to 634,935 in 1962. The number of members with no in-hospital medical protection was decreased from 169,524 in 1958 to 112,191 in 1962.

"At the end of 1962, 51% of our membership was enrolled under the preferred or special programs. Some 93% had in-hospital medical benefits, and 60% of our account members had $50, $75 or $100 diagnostic x-ray and pathology benefits. During the year, 65 accounts broadened their coverage to include some type of extended benefits.

"During 1962, we continued to offer Blue Shield preferred surgical and in-hospital medical benefits to all our direct pay members who originally obtained their membership through a group. We are also giving all persons submitting one of the inquiry cards found in physicians' offices and hospitals an option between standard and preferred.

"This upgrading of benefit patterns provides our members with the broadest possible coverage in keeping with the ever-changing practice of medicine. Improved benefit patterns also produce more income which has the effect of enabling Blue Shield to operate on a lower expense ratio to the membership fee dollar.

"Everyone associated with the plan—members, physicians, our Board of Directors, and the members of our executive, finance, physicians relations, liaison and other committees, and our administrative staff—can take pride in these accomplishments, and look forward to even more progress in the present year." ◄

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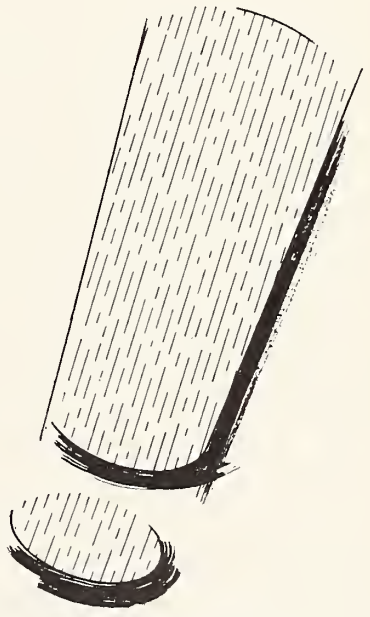
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ABSTRACTS

BOOK REVIEWS

FUNDAMENTALS OF VOLUNTARY HEALTH CARE

Edited by George B. de Huszar. The Caxton Printers, Ltd., Caldwell, Idaho, 1962. 457 pages. $6.00.

This book presents a collection of papers by physicians, economists, insurance experts and others who have great knowledge in the field. As the title implies, this symposium presents the case for the non-governmental approach of providing health care. It is divided into two parts. The first presents a background of moral, biological, and economic arguments; the second discusses the dangers of governmental intervention, economic issues, and voluntary mechanisms being used. This book gives a student of the subject an opportunity to study the statements of organized medicine of recent years.

E. T. EDWARDS, M.D.
Vincennes

FINANCING MEDICAL CARE

Edited by Helmut Schoeck. The Caxton Printers, Ltd., Caldwell, Idaho, 1962. 305 pages. $5.50.

The editor was born in Austria, educated in West Germany, and came to America following World War II. He is associate professor of sociology at Emory University and has had published articles on medical care since 1946. He has collected current comments on medical care systems in seven foreign countries by 15 authors who are respected authorities in their own countries. The discussions are clearly presented in an honest manner giving credit when due and criticism when justified. Many different approaches to governmental medical programs are described with each developing some disappointments for their planners. This book should be read by all concerned in planning and/or providing health care in this country. Physicians, politicians, and the public will find reading this book a rewarding experience.

E. T. EDWARDS, M.D.
Vincennes

DOCTORS, PATIENTS, AND HEALTH INSURANCE

Herman M. Somers, Anne R. Somers, abridged edition, paper back. Doubleday & Co., Inc., New York, 1962. 527 pages. $1.95.

The authors present an analysis of medical care in great detail covering changes in medical practice and its financing. An attempt is made to give both viewpoints on controversial subjects, but to a physician in private practice, the authors support the liberal philosophy. In fact, they balance their

Recent reports suggest...insulin and sulfonylureas may accelerate lipogenesis, fat accumulation, weight gain; thus appear to aggravate obesity in diabetics[1-5] ...serum "insulin" levels are often elevated in obese diabetics[2,3,6]...DBI (phenformin HCl) reduces high blood sugars, lowers elevated "insulin" levels, tends to reduce body weight toward normal.[1,3,7-9]

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conscience-pricking, incisive remarks of status quo with a clear exposition of the goals of the liberal which should be reason enough for all to carefully study this book.

E. T. EDWARDS, M.D.
Vincennes

MEDICAL CARE AND HEALTH INSURANCE

Joseph F. Follmann, Jr. Richard D. Irwin, Inc., Homewood, Illinois, 1963. 518 pages. $10.60.

The author, Director of Information and Research of the Health Insurance Association of America, has written the "bible" on this subject. This is a reference book to be studied page by page. Foreign and our own governmental programs are described as well as special problems facing voluntary provision of medical care and its financing in the United States. The author presents the many complexities which must be understood if we are to improve our health services.

E. T. EDWARDS, M.D.
Vincennes

THE MANAGEMENT OF A MEDICAL PRACTICE

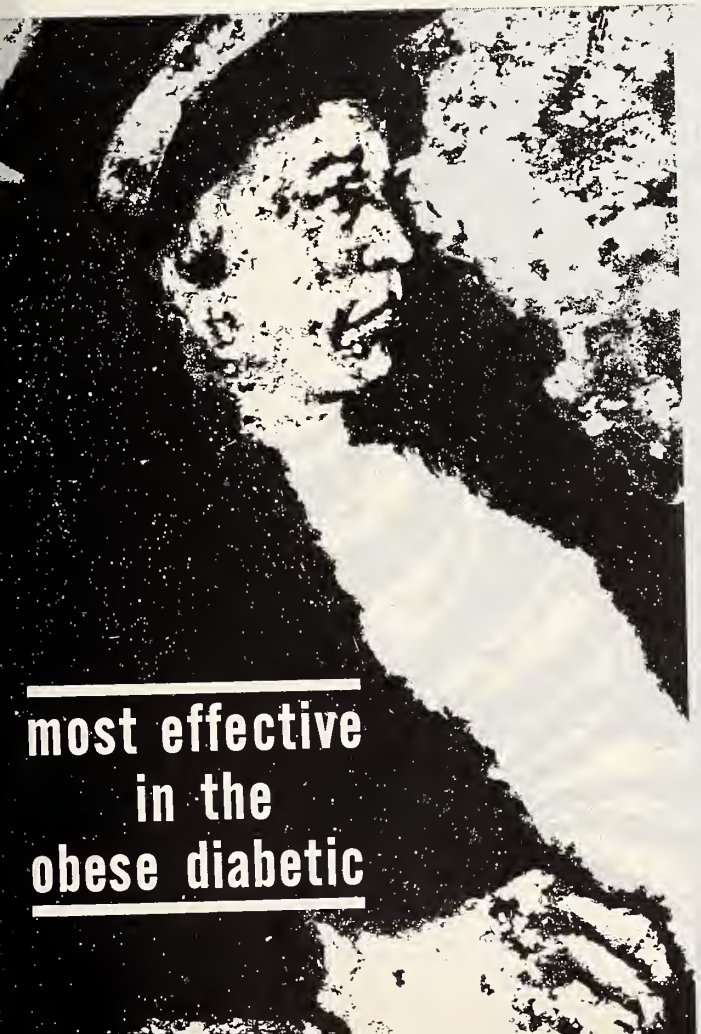
Nourse, Alan E., M.D., Marks, Geoffrey, M.A. J. B. Lippincott Company, Philadelphia, 1963. 387 pages. $9.00.

Every year numerous books appear dealing with the scientific aspects of medicine, but few are written concerning the business of the practice of medicine. While it is essential for the physician to improve his fund of knowledge, it is also important that a practice be financially successful. Poor business practices and poor medical practices usually go hand in hand. This comprehensive work fills such a need. The co-authors are exceptionally well prepared to write such a book; one is an experienced practicing physician and the other a management consultant who has contributed many articles to medical publications on the business aspects of medicine.

The first part of the book consists of five chapters devoted to the problems of practice; the areas of grievance; public relations and practice management; factors contributing to a successful practice and a philosophic basis for practice management. In this part of the book the physician-author covers every aspect of doctor-patient relationship and strongly espouses the cause of the comprehensive approach to medical practice, rather than just giving first aid. He appropriately defines a successful practice as one "in which the patients are satisfied and appreciative, in which the physician is compensated satisfactorily, and in which the quality of medicine practiced is not compromised and tends constantly to improve."

The second part of the book discusses in detail selection of a location; group and solo practice;

Continued



DBI and DBI-TD (phenformin HCl),

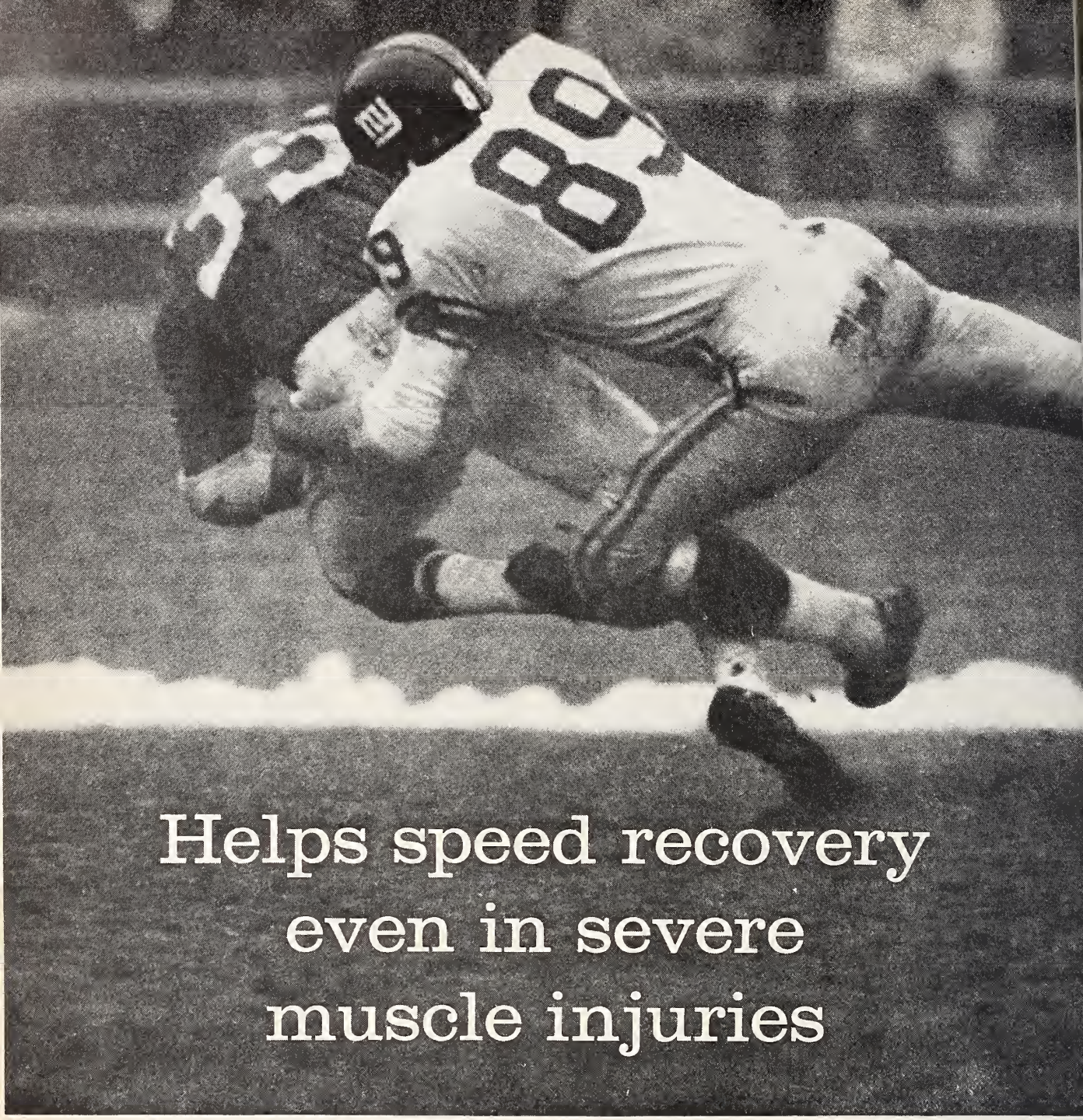
administered to ketoacidosis-resistant diabetics requiring hypoglycemic therapy: **A.** act to reduce high blood sugar without increasing fat synthesis or weight gain as insulin and sulfonylureas tend to do. **B.** do not increase already elevated endogenous insulin levels; may, indeed, act to restore more normal insulin levels. **C.** favor reduction of weight towards normal.

Insulin is still the essential hypoglycemic agent for the ketoacidosis-prone diabetic. However, in the ketoacidosis-resistant obese diabetic phenformin appears to be the hypoglycemic of choice to help avoid weight gain or reduce adiposity, a factor tending to make control more difficult and to increase the likelihood of complications.

Summary: Indicated in stable adult diabetes, sulfonylurea failures and unstable diabetes. Gastrointestinal side effects occurring more often at higher dosage levels abate promptly upon dosage reduction or temporary withdrawal. Occasionally an insulin-dependent patient will show "starvation" ketosis (acetonuria without hyperglycemia) which must be differentiated from "insulin-lack" ketosis, and treated accordingly. Use with caution in severe liver disease. Not recommended without insulin in acute complications (acidosis, coma, infections, gangrene, surgery). Consult product brochure for full information.

Bibliography: 1. Williams, R. H.: Textbook of Endocrinology, Ed. 3, Saunders, Philadelphia, 1962, p. 610. 2. Gordon, E. S.: Metabolism 11:819, 1962. 3. Grodsky, G. M. et al.: Metabolism 12:278, 1963. 4. Sadow, H. S.: Metabolism 12:333, 1963. 5. West, K. M. and Tophoj, E.: Metabolism 10:689, 1961. 6. Yalow, R. S. and Berson, S. A.: Diabetes 9:254, 1960. 7. Weller, C. et al.: Scientific Exhibit, A.M.A., June 1962. 8. Weller, C. et al.: Metabolism 11:1134, 1962. 9. Radding, R. S. et al.: Metabolism 11:404, 1962.

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As Conant demonstrated in a study of 106 patients with musculoskeletal injuries, 88% of the patients treated with 'Soma' (carisoprodol) achieved good to excellent results. *(Clinical Medicine*, March, 1962.)

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creating a proficient office staff; fees; estate planning; personal finances and insurance.

Undoubtedly even the well-established practitioner is at times harried by many difficult problems which this book will help him solve. But for the young doctor who has received no teaching regarding the business of medicine in his formal training, this book will bring immediate and much needed information which would take years of practice to gain. It fills the gap between the ivory towers of the medical school, the sheltered hospital internship and residency, and the rugged task of building and managing a successful medical practice.

While the text may appear to be a little overcomprehensive and extensive in its scope, it is easily read, highly informative, up to date and interesting. It is well indexed and contains only a few tables. A substantial need exists for such a guide at this time and it is worth the cost and time of reading for every practicing physician—whether young or old.

DAVID A. BICKEL, M.D.
South Bend

INTESTINAL BIOPSY

Ciba Foundation Study Group, Little, Brown and Company, Boston, Massachusetts, 1962. 120 pages. 53 illustrations. $2.95.

This booklet is composed of the transcripts of five papers and their discussion by 21 research workers from nine countries. The subject matter of the papers is peroral intestinal biopsy in health and in idiopathic steatorrhea, coeliac disease, tropical sprue, and the influence of a gluten-free diet on the intestinal histology in coeliac disease.

The appearance of the mucosa when studied by ordinary light microscopy, electron microscopy, and by the dissecting microscope is demonstrated by unusually good reproductions. The high value placed upon the dissecting microscope findings by these authorities will come as a considerable surprise to most pathologists.

The nature of the subject will interest only a limited audience composed chiefly of gastroenterologists, internists with an interest in intestinal biopsy, and pathologists. To those interested, the booklet is well worth its modest price.

JENE R. BENNETT, M.D.
South Bend

Abstracts From Various Literature, Prepared by AMA

EARLY INDICATIONS FOR EXCHANGE TRANSFUSION IN HEMOLYTIC DISEASE OF THE NEWBORN

Exchange transfusion (ET) has proved the most effective method in the severe forms of hemolytic disease of the newborn, especially erythroblastosis due to Rh incompatibility. According to most investigators there is danger of the development of kernicterus when the serum bilirubin concentration exceeds 20 mg. per 100 cc. At the author's clinic, kernicterus was never observed with values of less than 24 mg. per 100 cc., and so he feels that taking 20 mg. per 100 cc. as the upper limit, provides a "zone of safety." The prophylactic use of ET consists in using it shortly after birth in the presence of a relatively low bilirubin level. The expectant treatment consists in the serial control of serum bilirubin values and the employment of ET as soon as the bilirubin value approaches the critical level. The author describes studies on the changing serum bilirubin level in 80 newborn with erythroblastosis due to Rh incompatibility and in 40 healthy newborn who served as controls. Analysis of the data revealed (1) that there is a relationship between the initial value and the further increase in the bilirubin level; the higher the concentration of bilirubin in the umbilical cord blood, the steeper will be the ascent of the curve and the higher the peak value. (2) In moderate or severe erythroblastosis, the increase progresses evenly for about 48 hours. These factors indicate that ET is advisable in those cases in which it appears very probable that the serum bilirubin content will exceed the critical value of 20 mg. per 100 cc. at the latest by the end of the third day. ET is indicated within the first 24 hours, when, with a uniform

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M. C. Pitkin, M.D.
Medical Director

J. W. Gibbs, M.D.
Associate Medical Director

increase, the critical value of serum bilirubin will be reached within 48 hours.

Polacek, K.: Early Indications for Exchange Transfusion in Hemolytic Disease of the Newborn, *Mschr. Kinderheilk* 111:6 (Jan.), 1963.

DILATATION OF THE COLON IN ACUTE FULMINATING ULCERATIVE COLITIS

The records of 10 patients, aged 27 to 50 years, treated for acute fulminating ulcerative colitis with colon distension, were reviewed. The duration of the disease varied from four months to four years but no definite correlation was found between the duration of symptoms and the occurrence of distension. Only one patient responded to medical management, but the improvement was temporary. With one exception, the patients were treated with steroids; in eight of them the condition grew worse after this treatment. Total colectomy with ileostomy was performed on nine patients. The remaining patient, in whom the operation had to be concluded after the right portion of the colon had been removed, because of his serious condition, died five days after the intervention. The postoperative period of hospitalization for the nine surviving patients varied from 10 to 72 days. Steroid therapy seemed to be of little value and was frequently associated with acute or subacute perforation. Long-tube decompression, used in only one patient, seemed to be no improvement over gastric suction, which was of definite value in several patients, but useless in others. However, gastric suction is advisable whenever there is intraperitoneal inflammation and bowel distension. In view of the low mortality rate observed among the few patients with cecostomy and ileostomy alone, or combined with colostomy, consideration should be given to simpler decompressive and defunctioning procedures in the patient with severe distension who is an extremely poor risk.

Rowe, R. J.: Dilatation of the Colon (Toxic Megacolon) in Acute Fulminating Ulcerative Colitis, *Dis. Colon Rectum* 6:23 (Jan.-Feb.), 1963.

EFFECTS OF SODIUM D-THYROXINE ON NORMAL AND HYPERCHOLESTEREMIC MEN

The effects of sodium D-thyroxine on the serum cholestrol levels were investigated in hypercholesteremic men and in normal subjects. Thirty male patients with hypercholesteremia whose ages ranged from 38 to 56 years were chosen for the trial, and 20 healthy subjects agreed to cooperate. In order to conform to double-blind procedure, 10 patients from the hypercholesteremic group (group 1) and half of the healthy subjects (group 2) were given tablets of lactose identical to those of D-

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thyroxine. Neither the subjects nor the physician knew until after the trial who was being treated with the active substance. The daily dose of six mg. of D-thyroxine was continued for six weeks. It was found that the D-thyroxine significantly reduced the serum cholesterol levels in 19 of the 20 hypercholesteremic patients and in nine of 10 healthy subjects. The average fall in the hypercholesteremic group was 88 mg./100 cc. and in the normal subjects 44 mg./100 cc. Comparison of the basal metabolic rate before and after the trial showed no significant changes. The patients with angina pectoris (35% of the total) reported no increase in the frequency of anginal attacks during the trial. Sodium D-thyroxine reduces serum cholesterol efficiently, and in the dosage used in this trial is apparently without significant side effects. Further trials of the drug on a long-term basis are required before a final assessment of its value can be made.

Roper, B. W.: Effects of Sodium D-Thyroxine on Normal and Hypercholesteremic Men, *Brit. J. Clin. Pract.* 17:75 (Feb.), 1963.

ATYPICAL EPITHELIAL CHANGES IN THE UTERINE CERVIX

Atypical epithelium, i.e., epithelium showing changes just insufficient to warrant a diagnosis of carcinoma in situ, was re-studied in surgical material from 66 patients. Most of these specimens had originally been reported as suspicious or potentially malignant. Of the 66 patients, 62 were alive, and 46 of these were "untreated," having had no treatment to the cervix since the original operation. Thirty-seven of the 66 were examined personally, 28 of these being "untreated"; 19 were found to have gynecological abnormalities. Cytological examination was performed on 36, with only one suspicious smear; none of these patients was found to have invasive carcinoma or carcinoma in situ. Of the remaining 25 patients not seen personally, all were considered by their doctors to be free of any significant cervical lesion. The authors conclude that atypical epithelial changes of the uterine cervix are, over a period of three to 12 years, unlikely to progress either to carcinoma in situ or frank carcinoma. Persistence of inflammation of the genital tract despite previous treatment appears to be common. Six of 37 patients had either chronic cervicitis or vaginitis, and 19 of 37 had some gynecologic abnormality sufficiently severe to warrant further therapy in 14 patients. The high level of persistence, despite previous therapy, must give rise to doubts about the efficacy of cautery (and biopsy) of the cervix as a treatment for chronic cervicitis. More happily, these findings suggest that there is little relationship between chronic inflammation of the cervix with its associated epithelial abnormalities and carcinoma of the cervix. A selected group of 15 cases of probable carcinoma in situ was submitted to seven histopathologists. Opinions on the same section could vary from benign squamous metaplasia to frank invasive carcinoma. The agreement of only 66.6% in favor of a diagnosis of carcinoma in situ suggests that a source of reference and arbitration, such as a national panel, is required in order that a clear understanding be obtained of the diagnostic features of carcinoma in situ.

Kirkland, J. A.: Atypical Epithelial Changes in the Uterine Cervix, *J. Clin. Path.* (London) 16:150 (March) 1963. ◄

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Annual Meeting Dates of Professional Medical and Allied Organizations

INDIANA STATE SOCIETY OF ANESTHESIOLOGISTS

Date May, 1964

Place Indianapolis

INDIANA ACADEMY OF GENERAL PRACTICE

Date March 11-12, 1964

Place Murat Temple, Indianapolis

INDIANA NEUROPSYCHIATRIC ASSOCIATION

Date Second Wednesday of every month, October through May

Place The Athenaeum, Indianapolis

INDIANA OBSTETRICAL AND GYNECOLOGICAL SOCIETY

Fall Meeting

Date November 13

Place Marott Hotel

Annual Meeting

Date January 15, 1964

Place Marott Hotel

INDIANA ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY

Date May 6-7, 1964

Place Marott Hotel, Indianapolis

INDIANA ASSOCIATION OF PATHOLOGISTS

Date Dec. 1, 1963

Place Methodist Hospital

Annual Seminar

Date May 17, 1964

Place Veterans Administration Hospital

INDIANA PHARMACEUTICAL ASSOCIATION

Mid-Year Meeting

Date January, 1964

Place Indianapolis

NORTHERN INDIANA PSYCHIATRIC SOCIETY

Date November 13

Place Logansport State Hospital



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Available: 200 mg. Caplets® (green colored, scored). 100 mg. Caplets (peach colored, scored), each in bottles of 100.

Dosage: Adults, 1 Caplet (200 mg.) three or four times daily; in some patients 100 mg. three or four times daily suffices. Children (5 to 12 years), from 50 to 100 mg. three or four times daily.

Reference: 1. A.M.A. Council on Drugs: J.A.M.A. 183:469 (Feb. 9) 1963.

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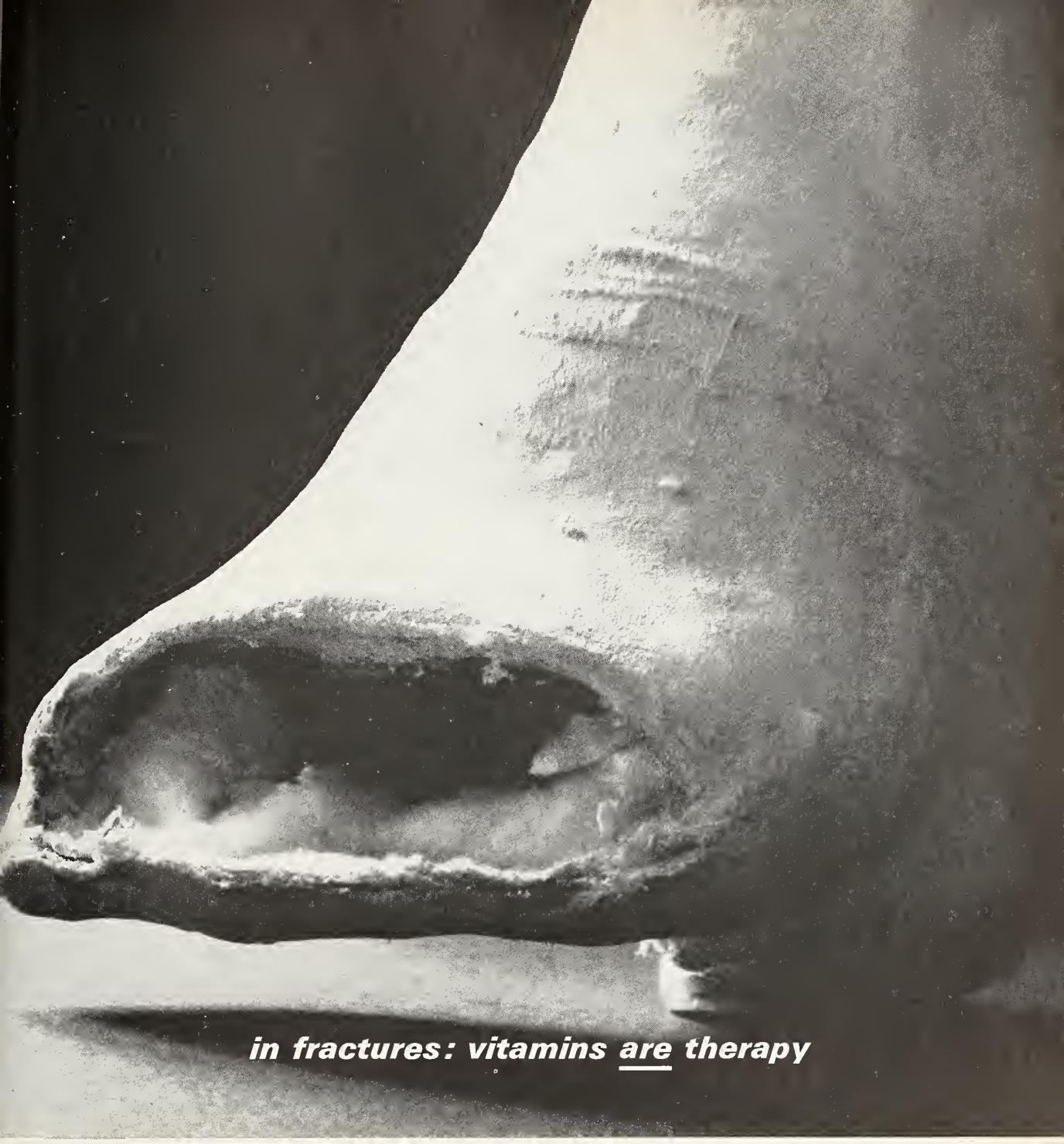
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INDIANA STATE BOARD OF HEALTH

MONTHLY REPORT—September, 1963

Disease	Sept. 1963	August 1963	July 1963	Sept. 1962	Sept. 1961
Animal Bites	733	1019	833	931	540
Chickenpox	37	40	58	69	22
Conjunctivitis	44	48	44	39	40
Diphtheria	1	0	2	1	0
Dysentery, Unspecified	197	270	6	48	37
Gonorrhea	304	323	245	Not Available	
Impetigo	146	135	78	202	235
Infectious Hepatitis	38	47	25	54	91
Infectious Mononucleosis	10	14	8	15	12
Influenza	253	105	90	599	261
Measles (Rubeola-Rubella)	88	111	241	57	80
Meningitis, Meningococcal	6	0	2	1	1
Meningitis, Other	8	7	7	3	6
Mumps	106	86	101	57	49
Pertussis	43	62	102	101	8
Pneumonia	99	64	60	61	94
Poliomyelitis	0	0	0	8	5
Streptococcal Infections	199	219	132	297	255
Syphilis					
Primary & Secondary	2	1	6	Not Available	
All Other Syphilis	86	100	114	Not Available	
Tinea Capitis	4	3	2	0	10
Tuberculosis (Active)	79	142	110	179	94





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The American Thyroid Association Offers Van Meter Prize for 1964

The American Thyroid Association again offers the Van Meter Prize Award of $500.00 to the essayist submitting the best manuscript of original and unpublished work concerning "Goiter—Especially Its Basic Cause." The studies so submitted may relate to any aspect of the thyroid gland in all of its functions in health and disease. The competing essays may cover clinical or research investigations, should not exceed 3,000 words and must be presented in English. Four typewritten copies, double-spaced, should be sent to the secretary *not later than January 1, 1964.*

The award will be made at the Annual Meeting of the Association at the Kahler Hotel, Rochester, Minnesota, April 30-May 2, 1964. A place on the program will be reserved for the winning essayist if he can attend the meeting.

It is suggested that the authors also submit a 300 word abstract.

Theodore Winship, M.D., Secretary
110 Irving Street, N.W.
Washington, D. C. 20010

W. B. Saunders Co. Announces Winners of Writing Fellowship

The W. B. Saunders Company has announced that Dr. Herman Kalckar, Professor of Biochemistry at Harvard Medical School and Dr. Paul Beeson, Ensign Professor of Medicine at Yale University School of Medicine, are the award winners of Saunders 75th anniversary writing fellowship.

These grants, each in the amount of $15,000, will provide for a year's leave of absence for the physicians to think about, write about and bring to print the results of their research.

Dr. Kalckar will be writing on Biological Patterns of Cells in Developmental Defects and Disease States. Dr. Beeson will be writing on Associations of Specific Infections with Certain Disease States of Man.

Formal presentation of the awards will be made individually to each grantee at two dinners to be held in the fall and early winter.

New Public Affairs Pamphlet On Senior Citizens Available

"A Full Life After 65" is the title and subject of a new Public Affairs Pamphlet, published with the cooperation of the National Institute of Mental Health.

The basic principles for happy and healthy old age, as explained in the 28-page booklet are: Accept things as they are when they cannot be changed; adapt to changing circumstances; fill the post-retirement years purposefully according to your own individuality.

The booklet may be obtained for 25 cents (at less in quantities) by writing Public Affairs Pamphlets, 22 E. 38th St., New York 16.

Dr. Urschel Elected

Dr. Dan Urschel of Mentone has been elected president of the Flying Physicians Association. Dr. Charles Loomis of Richmond and Dr. Edward Miller of Fort Wayne were chosen as members of the board of directors.

The association was founded in 1955 to promote aviation safety and to assist in the

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'Perazil'® brand Chlorcyclizine Hydrochloride	15 mg.
Phenacetin	150 mg.
Aspirin	200 mg.
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*Warning—may be habit forming

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nation's Civil Defense effort. Licensed physicians who are members of approved medical societies and who hold pilot's certificates are eligible for membership. Presently there are 85 physicians from Indiana who belong to the association.

New Film on Ulcerative Colitis Available to Indiana Physicians

"Diagnosis and Medical Management of Chronic Ulcerative Colitis" is the subject of a new 31-minute, 16-mm. color-sound medical movie prepared by the staff of the Scott and White Clinic of Temple, Texas.

It is available without charge for medical audiences by writing Pharmacia Laboratories, 501 Fifth Ave., New York 17. Alternate dates should be noted.

Call for Papers, Exhibits, Films For AMA 113th Annual Meeting

Those who desire to present scientific papers before the Sections of the Scientific Assembly should communicate with the secretary of the appropriate section well in advance of the deadline date, *December 15, 1963*. The secretaries and their addresses are listed in *The AMA Journal* in the last issue of every month.

Those who wish to apply for space in the scientific exhibit should request application forms from the director, scientific exhibit, Department of Scientific Assembly, American Medical Association, 535 N. Dearborn St., Chicago 10, Illinois, well in advance of the *deadline date for receipt of applications, January 10, 1964.*

Those who desire to present motion pictures should request application forms from the Director, Medical Motion Pictures and Television, Department of Scientific Assembly, American Medical Association, 535 N. Dearborn St., Chicago 10, Ill., well in advance of the *deadline date, January 10, 1964.*

S.S. Hope Begins Its Third Voyage to Ecuador This Fall

The hospital ship S. S. HOPE will begin its third voyage this fall when it leaves New York City to begin a medical mission

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Zinc (as Zinc Betaine Citrate)	1.25 mg.
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Vitamin B-1	1.5 mg.
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in Guayaquil, Ecuador. Previously the ship has visited Indonesia and South Viet Nam, and Peru.

Ecuador was chosen because of the intense desire on the part of physicians there for a HOPE visitation. The medical staff of the ship has trained some 1,700 local doctors and nurses in the three nations visited to date, performed over 4,000 major operations and examined and immunized nearly half a million people.

Indiana Physicians Appointed To Commission for Handicapped

Dr. Neal E. Baxter, Bloomington, has been reappointed chairman of the Commission for the Handicapped of the Indiana State Board of Health by Governor Matthew E. Welsh.

Dr. Baxter, and other members of the commission, appointed for four year terms, were sworn in by Peter M. Witham, deputy attorney general, in ceremonies at the Indiana State Board of Health building, recently.

Members appointed for four years terms include: Ralph N. Phelps, Indianapolis, vice-chairman; Theodore Dombrowski, Gary, secretary; Arthur L. Drew, M.D., Indianapolis; Gayle S. Eads, Indianapolis; Joseph W. Elbert, D.O., Petersburg; Stewart T. Ginsberg, M.D., Indianapolis; Frank M. Hall, M.D., Indianapolis; Howard G. Lytle, Indianapolis; Ralph E. McDonald, D.D.S., Indianapolis; Tony C. Milazzo, Greenwood; Harlan J. Noel, South Bend, and Mrs. Carolyn C. Tucker, Indianapolis.

Other members of the commission, whose terms do not expire for two more years are: Paul H. Hoge, Danville; Rutherford B. Porter, Ed.D., Terre Haute, and Aare Truumaa, Ph.D., Indianapolis.

The Commission for the Handicapped is charged with the responsibility of providing direction and leadership in the development of comprehensive rehabilitation programs for the handicapped citizens of Indiana.

Dr. Egan Presents Paper

Included among the more than 50 reports of progress in radiology made to the convention of the American Roentgen Ray Society in October at Montreal was a paper by Dr. Robert L. Egan of the Methodist Hospital in Indianapolis.

The topic was "A Reproducibility Study of Mammography."

Dr. Royster Retires as Adviser

Dr. R. A. Royster, Evansville, has retired from the position of adviser which he has held for several years with the American Association of Medical Assistants.

He was honored by election to honorary membership in the organization at its recent meeting in Miami Beach. The Indiana contingent took third place award for membership increase.

Dr. Cullen Locates Office

Dr. Kent Cullen has concluded an extended training program in surgery at the Mayo Clinic and is associated with his father, Dr. Paul K. Cullen, in the practice of surgery in Indianapolis. ◄

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Two important factors affecting the success of an amputee with a prosthesis are the fit of the socket on his stump, and the alignment of the prosthesis. With the Adjustable Leg the trained Hanger Prosthetist is able to achieve the best possible fit and alignment, which he can duplicate in the finished prosthesis.

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Laryngology, Bronchoesophagology Course Listed for March 16 through 28

The Department of Otolaryngology, University of Illinois College of Medicine, will conduct a postgraduate course in Laryngology and Bronchoesophagology from March 16 through 28, 1964, under the direction of Paul H. Holinger, M.D.

Registration will be limited to fifteen physicians who will receive instruction by means of animal demonstrations and practice in bronchoscopy and esophagoscopy, diagnostic and surgical clinics, as well as didactic lectures.

Interested registrants will please write directly to the Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk St., Chicago 12.

American Assn. of Professions Invites ISMA Members to Conclave

Members of the ISMA are invited to attend the annual meeting of the American Association of Professions which will be held at Lansing, Michigan on February 7 and 8, 1964, in conjunction with the meeting of the Michigan Association of Professions.

The program will highlight discussions on money for professional education, research and service.

Indiana Academy of General Practice Sets Fort Wayne Road Show

The Indiana Academy of General Practice will sponsor a road show in Fort Wayne December 3 in cooperation with Eli Lilly and Company.

The program, from 3 to 9 p.m., will be held in the Shrine Club at Fort Wayne. Alvin Haley, M.D., is local arrangements chairman. Speaker will be E. William Rosenberg, M.D., who will speak on "Theory and Practice in the Treatment of Warts" and "Relations of Skin to Water and Soap."

American Thyroid Association Meeting Will be April 30-May 2

The next annual meeting of the American Thyroid Association will be held at the Kahler Hotel, Rochester, Minnesota, April 30-May 2, 1964. Members of the association and all interested non-members are invited to submit abstracts for presentation at the meeting.

The papers may concern any original clinical or experimental study related to thyroid function interpreted in the broadest sense. The abstracts should be between 250 and 300 words. Five copies, typed, double-spaced, should be submitted to the Program Committee Chairman, Dr. Leslie J. DeGroot, Massachusetts General Hospital, Boston, Mass., by January 1, 1964.

1964 American Industrial Health Conference to be in Pittsburgh

The 1964 American Industrial Health Conference will be held April 13-16 at the Pittsburgh-Hilton Hotel in Pittsburgh, Pa. This medical-nursing conference, comprised of the annual meetings of the Industrial Medical Assn. and the American Assn. of Industrial Nurses, will bring together approximately 2,000 persons.

The scientific program, in which many of the nation's experts in the field of occupational health will participate, will be augmented by both scientific and technical exhibits. Further information about the conference may be obtained by writing American Industrial Health Conference, 55 East Washington St., Chicago, Ill. 60602.

American College of Allergists Sets 20th Annual Congress in March

The American College of Allergists graduate instructional course and 20th annual congress will be held March 1-6, 1964, at The Americana, Bal Harbour, Miami Beach, Florida.

For further information write: John D.

Continued



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Symposium on "Scintiscanning in Clinical Medicine" Set in January

A Symposium on "Scintiscanning in Clinical Medicine" will be held January 30-31, 1964, in Winston-Salem, N. C., sponsored by the Department of Radiology of the Bowman Gray School of Medicine.

Subjects to be covered will include the physical, electrical and pharmocologic principles of organ scanning as well as specific discussions of brain, thyroid, parathyroid, heart, lung, liver, spleen, kidney, pancreas and bone scanning.

Registration will be limited to 200. For details write to J. L. Quinn, III, M.D., Nuclear Medicine, Bowman Gray School of Medicine, Winston-Salem 7, N. C.

American College of Surgeons Sets 10th Annual Joint Meeting

Surgeons and graduate nurses are invited to the tenth annual joint meeting of the American College of Surgeons in New Orleans, March 16-19, 1964. Headquarters hotel for doctors will be the Roosevelt, and for nurses the Jung.

This is the college's only four-day meeting for 1964, and the only meeting with a program for nurses. This joint meeting pioneered in Cleveland in 1955, and has been a success ever since.

Scope of the meeting approaches that of the annual Clinical Congress. Doctors sessions will be held in general surgery and in the specialties of gynecology and obstetrics, ophthalmic surgery, otolaryngology, urology, proctology, neurologic, orthopedic, plastic, and thoracic surgery. There will be daily "How I Do It" nonoperative clinics—educational demonstrations by surgeons noted for specific techniques, scientific papers, panel discussions, selected films, and industrial exhibits of interest. ◄

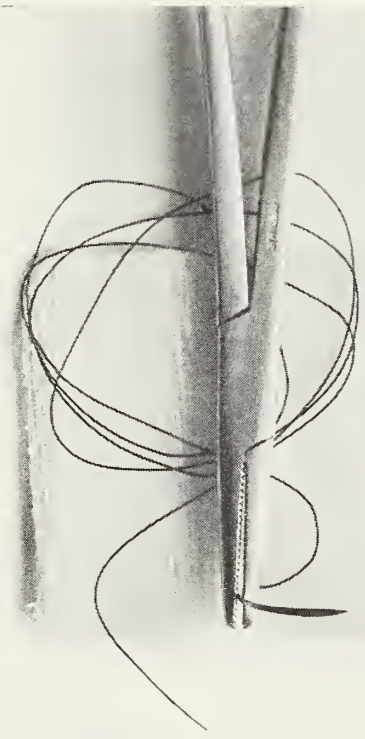
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*Warning—may be habit forming

Deaths

Kenneth C. Atchison, M.D.

Dr. Kenneth C. Atchison, 76, died Sept. 16 at a nursing home in Owensboro, Ky.

A native of Owensboro, Dr. Atchison was a graduate of the Jefferson Medical College, Philadelphia, Pa. He practiced medicine in Maceo before moving to Rockport in 1918 and had practiced there until his retirement.

Dr. Atchison was a member of the ISMA 50-Year Club and the Spencer County Medical Society.

Mattie J. Bullard, M.D.

Dr. Mattie J. Bullard, retired medical director of Gary public schools, died Oct. 3 at Methodist Hospital. She was 63.

Dr. Bullard was graduated from Rush Medical College in 1928. She went to Gary in 1938 as assistant medical director, became acting director in 1942, went to Europe for the U. S. Public Health Service in 1945 and assumed charge of the Gary school health program again in 1946. She retired in July last year.

W. Merle Hoppenrath, M.D.

Dr. W. Merle Hoppenrath, 69, Elwood surgeon and city health officer, died Sept. 16, in Mercy Hospital there.

A life resident of Elwood, Dr. Hoppenrath was a member of the Madison County Medical Society. He was a graduate of Indiana University School of Medicine in 1920, and was a veteran of both World Wars, serving in the Army in World War I and in the Navy in World War II.

George E. McCoy, M.D.

Dr. George E. McCoy, 45-year-old Muncie pediatrician, and four members of his family were killed Aug. 9 when his private plane crashed in Ohio. The aircraft vanished in a thunderstorm in August but wreckage of the plane was not found until Sept. 27.

He began his practice in Muncie in 1949 after graduating from Purdue University and the University of Cincinnati Medical School. He was on the staffs of Ball Memorial Hospital, a consultant in pediatrics at Mercy Hospital in Elwood and school physician in the Muncie city schools.

He was a member of the Delaware-Blackford County Medical Society.

O. W. Ridgeway, M.D.

Dr. O. W. Ridgeway, retired Indianapolis surgeon and former physician at the Indiana School for the Deaf, died Sept. 6 at Fort Lauderdale, Fla. He was 84.

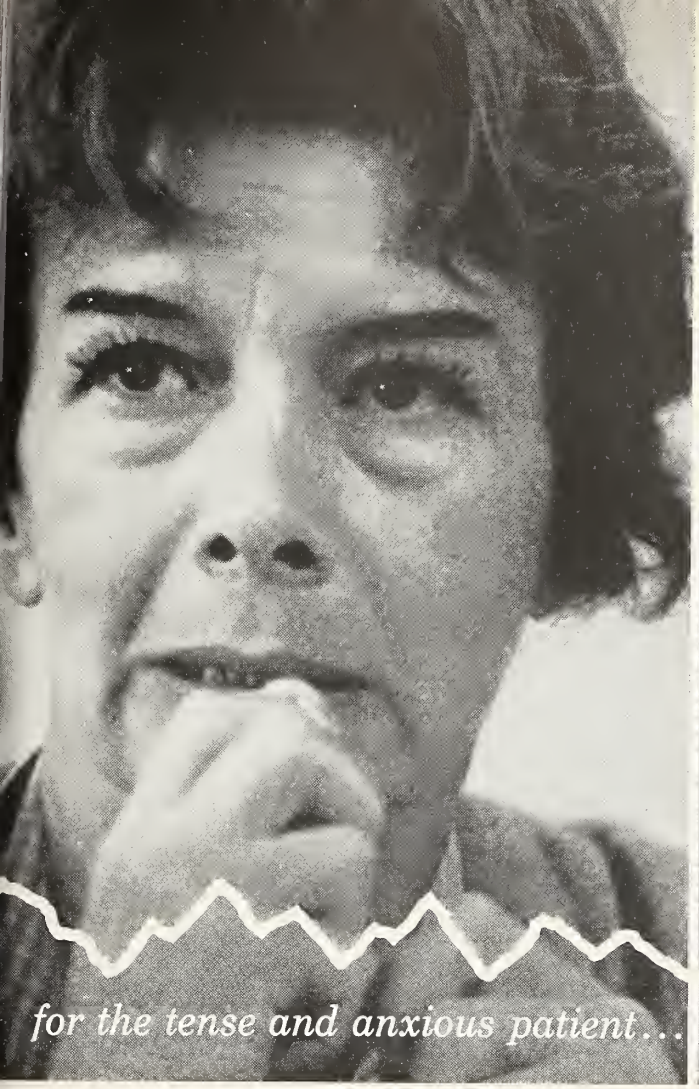
A native of Sullivan County, Dr. Ridgeway lived in Indianapolis for 62 years. He was physician at the School for the Deaf 18 years and a staff member at Methodist Hospital. Dr. Ridgeway was graduated from the I. U. School of Medicine in 1909. He was a member of the Marion County Medical Society and the ISMA 50-Year Club. ◄

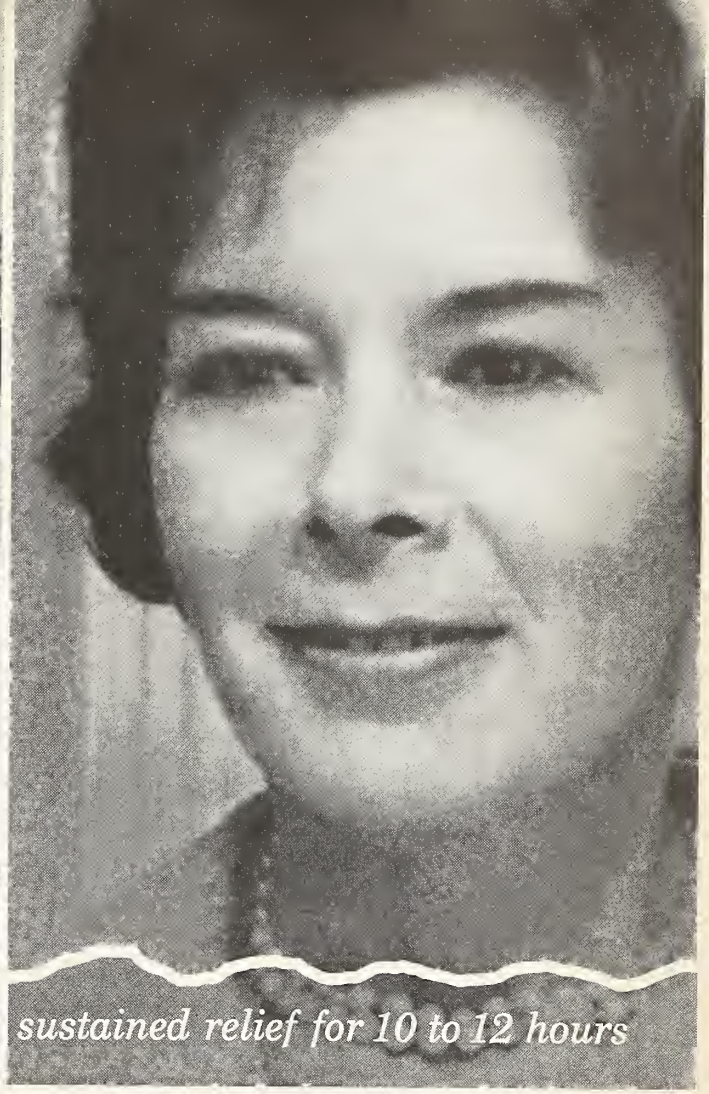
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Side Effects: Rarely, skin reactions. May increase effects of excessive alcohol. Use with care in patients with suicidal tendencies. Massive overdosage may produce coma, shock, vasomotor and respiratory collapse. Consider possibility of dependence in patients with history of drug or alcohol addiction.

Available: *'Meprospan'-400* (meprobamate, sustained release) contains meprobamate 400 mg. *'Meprospan'-200* (meprobamate, sustained release) contains meprobamate 200 mg. Both potencies in bottles of 30. **Usual dosage:** One 400 mg. capsule or two 200 mg. capsules at breakfast; repeat with evening meal.

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meprobamate 400 mg.
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County, District News

Fifth District

Dr. Forrest R. Buell, Clay City, has been elected president of the Fifth District.

Assisting him will be Drs. Richard G. Mehne, Brazil, vice-president; Charles E. Moon, Center Point, secretary and V. Earle Wiseman, Greencastle, re-elected councilor. Next year's meeting will be held in Brazil.

Eleventh District

Newly elected president of the Eleventh District is Dr. Lester Renbarger, Marion. Newly elected secretary-treasurer is Dr. Max Earl, Kokomo.

Thirteenth District

Dr. Thomas D. Armstrong, Michigan City, will serve as president of the Thirteenth District for the coming year. Dr. Guy Ingwell, Knox, is the new vice-president and Dr. Cecil R. Burket, Bremen, the new secretary-treasurer. Dr. E. G. Dovey, Elkhart, was elected as Blue Shield board member.

Cass

Dr. H. Mathew discussed the Cass County Mental Health Clinic with the 22 members present at the Sept. 9 meeting of the Cass County Medical Society.

Clinton

The Clinton County Medical Society met Sept. 24 at the Clinton County Hospital. There were 13 members present. Field Secretary Howard Grindstaff attended the meeting and discussed the resolutions to be presented at the ISMA annual meeting.

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Floyd

Dr. Robert Lehman, Louisville, Ky., psychiatrist, and Dr. D. Swan Haworth, who is on the faculty at Southern Baptist Theological Seminary, discussed "Religion and Medicine" before the Sept. 13 meeting of the Floyd County Medical Society. There were approximately 100 physicians and ministers present at the meeting.

Fulton

Approximately 14 members attended the Oct. 4 meeting of the Fulton County Medical Society to hear Field Secretary Grindstaff discuss the ISMA meeting and the Mental Health regional meeting.

Hancock

Dr. Bronie Vingis, Greenfield, showed movies of a trip to the western states and Canada before the Sept. 23 meeting of the Hancock County Medical Society. There were 13 members present.

Marshall

The Marshall County Medical Society met Oct. 2 with 15 members in attendance. Dr. Russell Hippensteel discussed the resolutions to be presented at the ISMA annual meeting with the members.

Owen-Monroe

Dr. R. D. Arnold, Indianapolis, spoke on "Population Problems" before the Sept. 26 meeting of the Owen-Monroe County Medical Society. There were 24 members attending.

Orange

Eleven members attended the Oct. 1 meeting of the Orange County Medical Society. Field Secretary Robert Amick met with the society.

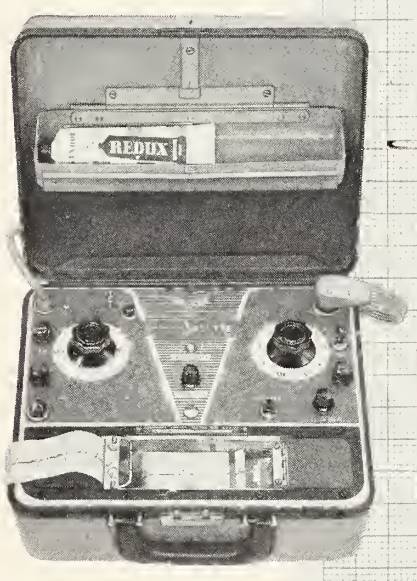
Starke

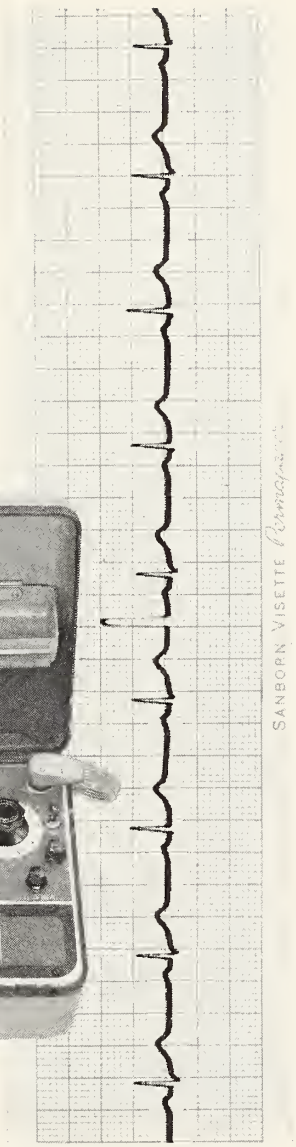
The Starke County Medical Society met Oct. 1 with seven members present. Field Secretary Grindstaff met with the group to show the film "Operation Hometown."

Vanderburgh

Mr. Alan Brentano of Keller Crescent Company spoke on the function of the Evansville Future Foundation and the Chamber of Commerce and the role they play in the community before the Oct. 8 meeting of the Vanderburgh County Medical Society. ◄

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This summary of what is happening in Washington is prepared by A.M.A.'s Capitol office and air-mailed to *The Journal* on the ninth of each month preceding month of issue.

MONTH IN WASHINGTON

WASHINGTON, D. C.—President Kennedy signed into law two bills providing for a five-year, $594.2 million federal program to combat mental illness and mental retardation through expanded research and community treatment centers.

A key feature of the legislation is a $150 million program of grants to the states for construction of community mental health centers for inpatient and outpatient treatment of the mentally ill. Administration officials said they hoped that such centers eventually would be able to take care of as much as 50% of the mentally ill persons now in state mental institutions. One aim of the centers is to have the family physician play a larger role in the treatment of the mentally ill.

The new law contains no authority for federal funds for staffing these centers, most controversial aspect of the legislation in Congress. The American Medical Association opposed the staffing provision.

In signing the bill, President Kennedy announced that Robert Aldrich, Director of the National Institute of Child Health and Human Development, will soon call together 50 scientists from this country and abroad to plan research on premature births.

He also announced that the office of education was setting up a new division for handicapped children and youth to administer the teaching and research program under the new law. It will be headed by Samuel Kirk, Professor of Education and Psychology at the University of Illinois.

The new law also provides $179 million over three years for construction of treatment and research facilities for the mentally retarded and for training of teachers for mentally retarded children.

Earlier, President Kennedy had signed into law another part of the mental retardation program that was approved in separate legislation by Congress. This calls for $355 million to increase Federal aid in fighting mental retardation through improved maternal and child care. The five-to-seven-year program includes a plan to provide preventative medical care for low income mothers with a high risk of giving birth to retarded children.

FDA LISTS FINAL ORDERS ON DRUG ADVERTISING

The Food and Drug Administration issued the final orders on how it will carry out the new drug law's provisions covering ethical drug advertising. The federal agency agreed to modify most of the proposed regulations that the drug companies had protested.

One previously disputed section of the regulations was felt by the companies possibly to require the pre-publication submission to FDA of advertising for virtually all important new drugs. The FDA revised the regulation to require "prior approval" of advertisements by the FDA only if the agency or the sponsor of the drug receives information not widely publicized in medical literature that use of the drug may cause fatalities or serious damage.

Another issue raised concerned sections of the regulations relating to "fair balance" and "relative prominence" of information on effectiveness and precautions in use of prescription drugs in advertising copy and layouts.

FDA assured the industry that the regulations will not prohibit use of graphic presentations, headlines or other "advertising technics." The regulations, as now clarified by the agency, will not require equal divisions of space, word counts, headlines, illustrations and so forth. On the other hand, the regulation will require that statements about precautions for use of drugs be presented in type and format to insure adequate prominence and readability.

An additional question concerned an apparent requirement that advertisements must list side effects and contra-indications for all common uses of a given drug, even if some of the uses are not referred to in the advertisement. In a clarifying statement, FDA said, in effect, that the non-recommended uses need not be mentioned in most instances--that since side effects depend for the most part on duration of use, size of dosages or class of patients, it is appropriate that the side effects be disclosed only as related to these factors. The drug firms said this served to remove their principal concern on this point.

Another issue involved in the new drug law is a section of the regulations which would require that the established or generic name of a drug must accompany each separate mention of the drug's proprietary or brand name in an advertisement and in labeling. The drug firms maintained in a federal court suit that these regulations go beyond the FDA's statutory authority, since the statute requires only that established names of prescription drugs be printed in labeling and advertising "prominently and in type at least half as large as that used for any proprietary name."

FDA REORGANIZED TO UPGRADE SCIENTIFIC WORK

The Food and Drug Administration was reorganized to upgrade the scientific aspects of the agency's work.

The new setup adopts major features from recommendations of a citizens advisory committee report in October, 1962.

HEW Secretary Anthony Celebrezze said that "an important feature of the reorganization is the upgrading of the scientific functions. I expect the reorganization to improve FDA operations all along the line. . . . "

An important feature of the reorganization will be the appointment of a National Advisory Council to FDA. It will advise the Administration on national needs and the effectiveness of program policies.

A new associate commissioner, who will be a scientist, will give

Continued on page 1500

RECOGNIZE THIS PATIENT?



"I don't sleep well . . . I dream a lot . . . wake up tired and irritable. I don't have any appetite . . . I'll never be cured."

When you recognize signs of depression and anxiety and associate them with an organic condition—add 'Deprol' to your therapy.

Typical conditions in which 'Deprol' should be considered for control of the associated depression and anxiety:

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When you recognize depression and anxiety traceable to an emotionally charged situation with no somatic disorder—start the patient on 'Deprol'.

Typical situations in which 'Deprol' is indicated:

fear of cancer or other life-threatening disease ■ pre- and post-operative fears ■ postpartum despondency ■ family problems ■ death of a loved one ■ loss of work ■ retirement problems ■ financial worries, and many other stressful situations.

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BRIEF SUMMARY: *Indications:* Depression, especially when accompanied by anxiety, tension, agitation, rumination or insomnia. *Side Effects:* Slight drowsiness and, rarely, allergic reactions, due to meprobamate, and occasional dizziness or feeling of depersonalization in higher dosage, due to benactyzine, may occur. Meprobamate may increase effects of excessive alcohol. Use with care in patients with suicidal tendencies. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction. Withdraw gradually after prolonged use at high dosage. *Complete product information available in the product package, or to physicians upon request.*

USUAL ADULT DOSAGE: 1 tablet q.i.d. May be increased gradually, as needed, to 3 tablets q.i.d.; with establishment of relief, may be reduced gradually to maintenance levels.

SUPPLIED: Light-pink, scored tablets. Bottles of 50.

WALLACE LABORATORIES / *Cranbury, N. J.*

CD-817

MONTH IN WASHINGTON

Continued from page 1497

leadership from the office of the commissioner to the programs and functions having to do with medicine, science and research.

Two new bureaus with scientific activities were established—a Bureau of Scientific Research, supporting FDA's basic mission of consumer protection, and a Bureau of Scientific Standards and Evaluation, which will handle safety clearance functions. ◄

About Our Cover



This is not "About our Cover" because, just prior to going to press, on November 22, 1963, the infamous hand of the assassin was raised for the fourth time in our Nation's history.

Abraham Lincoln was shot while attending the theatre in 1865, James Garfield was killed at a railroad station in 1881 and William McKinley was mortally wounded standing in a reception line in Buffalo in 1901.

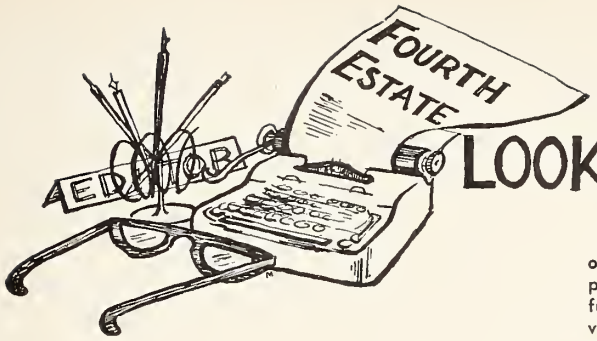
On a sunny November morning in Dallas, while riding in an open car, a sniper's bullet found its mark, striking down the 35th President of the United States of America; John Fitzgerald Kennedy, in the third year of his term of office and the 46th year of his life.

This was a tragedy that transcends party politics. It was an insult to the dignity of office—a merciless taking of a life dedicated to public service.

Modern communications and the ease and speed of travel have, in the last two decades, made it possible for the Chief Executive to communicate intimately with the Nation he leads. There can be few Americans indeed who are not wholly familiar with the late President's every mannerism and turn of phrase.

In some measure it is these very advances that have contributed to the shock and to the feeling of intense personal sorrow that has ravaged not only the United States of America but the whole world.

There died, in Dallas, a man who fervently believed that "This above all: to thine own self be true, And it must follow, as the night the day, Thou canst not then be false to any man."—M.E.R.



LOOKS AT MEDICINE

This section of THE JOURNAL is devoted to the presentation of opinions which appear on the editorial pages of the public press, and which are of interest to the medical profession. Its function is to review comments which may be favorable or unfavorable to medicine. Members are invited to submit editorial clippings for this column.

On The Move

Back in 1959, the last year of the Eisenhower administration, the Federal government collected $464 in taxes for every man, woman and child in the United States.

In 1963 the Kennedy Administration is collecting $571 per capita in Federal taxes. That's an increase of $107. And next year the amounts is estimated at $583—up another $12.

This is what is described as "getting the country moving again."—*Indianapolis Star*, Sept. 26, 1963.

Not by Bread Alone

A new dimension has been added to the practice of medicine. This happened at the most recent annual meeting of the American Medical Association, when the first program on medicine and religion was presented.

This is a direct result of the rapid advance of medical science. New problems and new needs demanding cooperation by the medical fraternity and churchmen have been created. It is recognized, nowadays, that health is affected by physical, spiritual, emotional and social conditions, and that ideal treatment should be directed toward the whole man. The AMA began its efforts to make this ideal of health care realistic by establishing a Department of Medicine and Religion. Ten physicians and 10 clergymen were named to provide counsel. Pilot programs followed, and now this department is prepared to offer its services to hundreds of state and local medical societies.

The need was spoken in the 17th century, by John Donne, poet, preacher, and patient: "I observe the physician with the same diligence as he the disease; I see he fears, and I fear with him. . . . I fear the more because he disguises his fear, and I see it with the more sharpness because he would not have me see it. He knows that his fear shall not disorder the practice and exercise of his art, but he knows that my fear may disorder the effect and working of his practice."

So we return to the ancient injunction—man does not live by bread alone.—*Muncie Press*, Sept. 12, 1963.

Killers Pinpointed

Tomorrow's doctors and medical research scientists will more and more direct their skills toward conquering the diseases of old age. Aside from accidents, the perils of childhood have simply been rendered statistically insignificant.

According to the Metropolitan Life Insurance Co., if all deaths in the first 25 years of life could be prevented, the expectation of life at birth for the general population would be increased only three years.

In fact, if nobody—repeat, nobody—died before the age of 50, the average lifetime would rise by only 5½ years, or only one-fourth the gain made since 1900.

The statisticians conclude that further progress in longevity will depend largely on cutting deaths from the chronic and degenerative diseases.—*Muncie Press*, Oct. 15, 1963.

Ready To Help

Action by the Indiana State Medical Association to assist in improving medical care in state institutions is most welcome.

Hoosier doctors can provide the citizens of the state with advice and active assist-

ance in a very critical area. The need for competent review of medical treatment for patients at Muscatatuck School For The Mentally Retarded is fresh in the minds of many. There is no machinery whereby an impartial, disinterested survey of medical care or psychiatric treatment there may be carried out.

The reaction of Dr. Stewart T. Ginsberg, state mental health commissioner, to this proposal by the doctors was encouraging. Dr. Ginsberg has been sensitive to any suggestion for improvement in treatment for the mentally ill in Indiana, or the mentally retarded. He has been defensive past the point of good judgment. Perhaps he will be ready to accept reasonable comment by members of the medical profession.

Public officials, from the Governor's office on down, should be ready to accept graciously this offer of special assistance. The Indiana State Medical Association is to be congratulated on its generous, public-spirited offer.—*Indianapolis Star*, Oct. 17, 1963.

Perambulating Hypochondriasis

"I sometimes feel that we are becoming a nation of economic hypochondriacs," remarked Gardner Ackley of the President's Council of Economic Advisers the other day, feelingly.

And then Mr. Ackley spelled out the syndrome:

"The pulse-taking and fever-charting in which we engage; the scrutiny of the monthly indicators, the learned and not-so-learned dissections of Gross National Product and industrial production sometimes remind me of a friend of mine who keeps a thermometer in his desk drawer, a calorie chart in his vest pocket and litmus paper in his lavatory."

But we notice that Dr. Ackley made these remarks in New Hampshire and not in Washington. And we have a feeling of our own that back in the capital he must now be getting those wary, uncomfortable glances usually reserved for the psychiatrist at the cocktail party where the guests feel their pretensions may be seen through.

For if constant pulse-taking and fever-charting is a symptom of the Ackley syndrome, then Washington is the place for clinical study of economic perambulating hypochondriasis. Let there be an upturn of a fractional point in a leading index and the corridors are wreathed in smiles; let a decimal point slip, and the gloom reaches all the way to the White House.

At best this is pretentious in its solemn reliance on statistics that are not so precise or so meaningful. But while ordinarily this constant preoccupation with minute changes in the thermometer might be as harmlessly humorous as Dr. Ackley paints it, the humor is strained when the economic doctors themselves try to frighten the public for political purposes.

That is what we are witnessing right now in connection with the tax bill, and so infectious is this scare technic employed by the Administration that it has been taken up by a good many business leaders who ought to know better.

There are many sound reasons for a tax cut. There are even some weighty arguments—though personally we aren't persuaded by them—for a tax cut in the face of the huge budget deficit it portends. These have been ably made by the President, the Council of Economic Advisers and the proponents of the tax measure in Congress.

But from the beginning the Administration was not content to rest its case on these. When the measure was first proposed it was also offered as a means of counteracting the recession which, last January, we were supposedly on the verge of. In short, it was proposed both as a sound diet and a pickup hypodermic.

Today it's clear that whatever economic troubles we have we don't have a recession. Most indicators show high business activity and point still higher; even unemployment, while greater than anyone wishes, is not as large as it was. Since this development has demolished one of the arguments for the tax bill, this happy state of affairs for the country has made the advocates of tax cuts politically unhappy.

So now the line of argument has shifted. Since we don't have a present recession to be got out of, we are now bombarded with

dire warnings that we will have a future one if we don't quickly take the proferred hypodermic needle. And in order to make this argument more effective — that is, more scary—we have to be told that this recession is so imminent the tax bill can't wait even a few weeks.

This is not only the current official line, it's been adopted by something called the Business Committee for Tax Reduction in 1963, the very name of which is calculated to suggest urgency. Just the other day this committee warned that the economy is approaching a "critical juncture" and that the "cut-off point" of prosperity may be near. So please, quick, Watson, the needle.

Well, we aren't so wise as to know where the cut-off point of prosperity is. We are pretty sure that if in the course of events there is another recession in business activity it won't be because the tax bill isn't passed in the next fortnight.

Maybe, as the good doctor says, we are all getting to be a nation of economic hypochondriacs. But sometimes listening to the physicians it sounds as though they are trying to keep us in a constant state of nerves. —*Wall Street Journal*, Oct. 23, 1963. ◄



From the Journal 50 Years Ago

. . . We are obligated by virtue of our position as protectors of our patients to take an active part in the securing of special legislation looking toward the betterment of public hygiene and sanitation. It is given us because of our medical education to know better than any other class of men what things are needed to best improve the breed and living conditions of the human race. So there should be no shirking of the doing of our level best toward the securing of legislation such as will accomplish the needed reforms. We should watch each session of our state legislature and endeavor to secure the passage of worthy bills and to defeat vicious ones.

* * *

The agitation for the compulsory use of silver salts in the eyes of all the newborn, now a law in Indiana, is a far step in the beginning of a paternalistic government campaign that can only result in more and more care and control of the public life, so that we may reduce to the lowest possible minimum not only the death rate but the actual rate of sickness itself.

The supreme ideal standing before us today is that we may strive to reach the day when preventive hygiene and sanitation and preservative control of the sickroom shall have indeed resulted in a true medical nihilism that will have laid low our present materia medica in the grave we have already dug for the incantation of the witch doctor, the bloodletting of the barber-physician and the use of dram doses of calomel every half hour. . . .—"Medical Citizenship" by James B. Maple, M.D., *JISMA*, December, 1913.

Art, Hobby Show Planned For ISMA Indianapolis Meeting

Space will be provided at the 1964 annual meeting of the Indiana State Medical Association, Oct. 13-15 at Indianapolis, for a Physicians Art and Hobby Show.

Members of ISMA interested in exhibiting pieces and requiring any information regarding this can contact any one of the following:

Dr. Philip T. Holland
108 W. 7th Street
Bloomington

Dr. Charles P. Schneider
2211 W. Franklin St.
Evansville 12

Dr. Truman E. Caylor
303 S. Main St.
Bluffton

Dr. Frank H. Coble
51 S. Eighth Street
Richmond

Dr. Lall G. Montgomery
Ball Memorial Hospital
Muncie

ISMA Headquarters
3935 N. Meridian
Indianapolis 8

It will be the responsibility of each physician to see that his work gets to the exhibition at the Murat Temple. Final arrangements will be taken care of by Dr. Holland and his committee.

The ISMA will provide suitable display facilities, but each physician is responsible for transportation costs and any other such expense involved in entering his exhibit.

Application for Space in Art and Hobby Show Exhibit

Mail to:

Dr. Philip T. Holland
108 W. 7th Street
Bloomington, Indiana

Name_____

Address_____ City_____

Type and number of pieces to be displayed: Photography_____

Sculpture_____

Crafts_____

Painting_____

Other_____

Estimated amount of space required—lineal or square feet_____

Other information_____

The Journal of the INDIANA STATE MEDICAL ASSOCIATION

Supervised by THE COUNCIL

Volume 56 — December 1963 — Number 12

Bowel Resection in the Infant

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MANY PROBLEMS are involved in resection of the bowel in infants. Besides all the hazards present in any bowel resection, there are the added factors of small size and an abnormality requiring emergency operation. Bowel surgery in the very young is usually caused by a congenital defect—an atresia, stenosis, congenital band, hernia, malrotation . . . any of these errors of development. It may be accompanied by other defects, either in the gastrointestinal tract or in other organs. A meconium ileus, for example, can be the first evidence of polycystic disease involving the pancreas and other organs. The pediatric surgeon, then, must accept as normal handicaps for his patients, their small size and the fragility of their physique.

Preoperative Considerations

In preparing to operate on an infant, the surgeon should be reasonably sure of his diagnosis. This sounds trite, and maybe it is, but the general region of obstruction should be ascertained before the abdomen is opened.

A well-trained, observant, and interested nurse usually picks up the first signs of an obstruction. When she informs a doctor that the baby has regurgitated green material, is fretful, has passed no meconium per rectum and appears distended, then the doctor had better pay attention—even if it's two a.m. and he's sleepy.

A careful physical examination is mandatory. The inspection of, and gentle probing of all openings, especially the anal canal, are essential to this examination. X-rays are indicated—a flat film is of great value in any bowel obstruction. A barium enema will help to locate the area of difficulty. This procedure, which is relatively safe, can outline atresias of the large bowel, intussusceptions involving the terminal ileum or any part of the colon, and malrotations.

If the enema shows an intussusception, reduction can, at times, be effected in the fluoroscopy room. If the enema shows normal findings, but many dilated loops of small bowel are visible, the obstruction is in the small intestine and is probably caused by an atresia or stenosis. Only rarely will contrast media by mouth be needed to localize an obstructing bowel lesion.

Decompression by means of a nasogastric tube should be instituted as soon as the diagnosis is evident. Long tubes are a waste of time. Determination of electrolytes is indicated. If they are abnormal, correction can be carried out preoperatively by means of the necessary fluid preparations

given intravenously through a cutdown. Scalp veins are all right for ordinary pediatric illnesses, but needles don't stay in scalp veins well when anesthesiologists and surgeons manipulate a baby. If the electrolyte levels are normal, that's fine. The operation can be done sooner, and a base line has been established that can be referred to postoperatively.

The question always arises: When is the best time to operate? In general the answer is: At the earliest possible time an anesthetic can be given safely. (There will be rare times in the gravely ill infant when an anesthetic is unsafe, but operation must be undertaken anyway.) The anesthetic should be *endotracheal* and must be given by a competent anesthesiologist. This is just as important as the care with which the surgical procedure is done.

Technical Aspects

It makes little difference whether the abdomen is opened through a vertical or a transverse incision. This is a matter of the surgeon's personal preference; however it is important that the nerves supplying the abdominal musculature be kept intact. Strict adherence to aseptic technic is a foregone conclusion and need not be discussed here.

In an infant, delivery of the bowel outside the abdominal cavity is necessary before a surgeon can work on it. Care must be taken that no interference in the blood supply to the intestine occurs during prolonged procedures. Warm, moist laparotomy pads should protect the exposed bowel to prevent drying or cooling. "Losing" the child beneath several layers of heavy drapes is unnecessary and may, at times, be hazardous should respiratory ventilation become a problem. A newborn baby is likely to be cold immediately after an operation. An isolette in which temperature, humidity and gaseous components of the air can be regulated is very helpful, especially in the immediate postoperative period.

Matching the dilated proximal portion of bowel to the collapsed, undilated distal bowel presents a problem. This has led many surgeons to use the side-to-side anastomosis to circumvent the disproportion (Figure 1). There are drawbacks, both early and late, to this type of realignment. Three suture lines are necessary, and any one of them may leak. Multiple incisions in close proximity in the bowel can lead to interference with blood supply, necrosis and peritonitis.

One of the later complications of a side-to-side anastomosis is dilatation of the distal, blind end of the proximal segment producing encroachment on the distal bowel lumen from external pressure. The net result is a partial obstruction.

End-to-end anastomosis is done much more frequently now (Figure 2). This, of course, presents problems because of the marked disparity in the size of the two segments. To overcome this, the proximal, dilated bowel is clamped straight across, and the distal bowel is clamped diagonally. After the obstructing portion is removed and the two ends are brought together, there will probably still be differences in the caliber of the lumens. The distal opening can be enlarged by splitting the antimesenteric border of the bowel until the lumen is the proper size to match that of the proximal bowel.

The advantage of end-to-end over side-

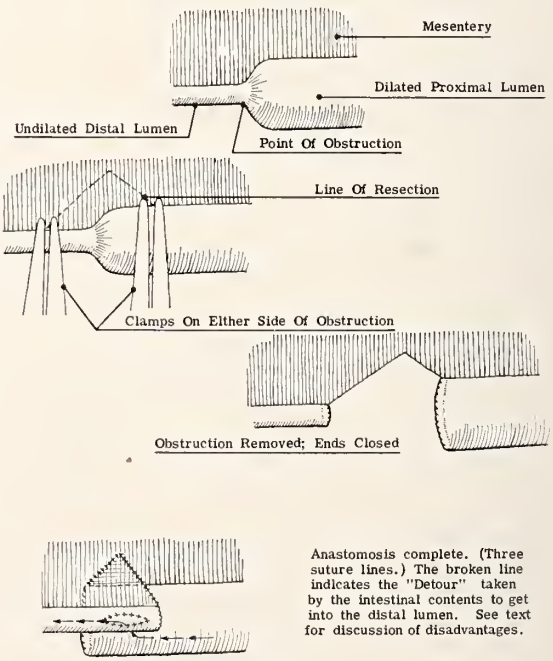


FIGURE 1
STEPS in side-to-side anastomosis.

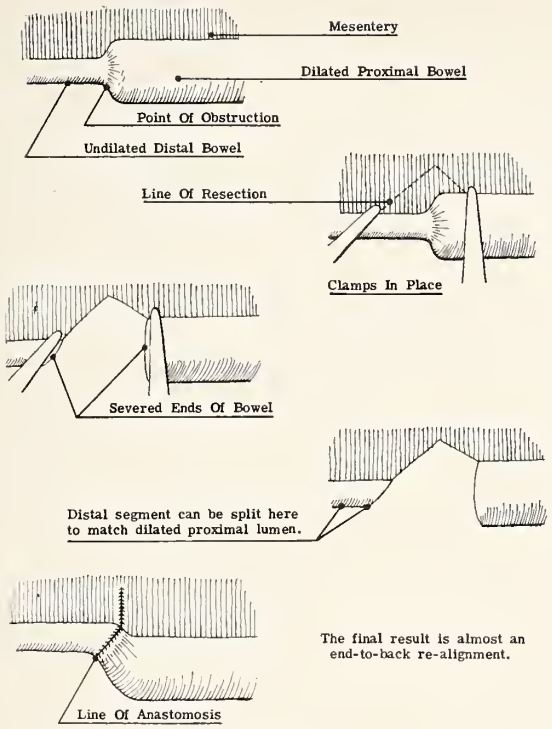


FIGURE II
STEPS in end-to-end anastomosis.

to-side anastomosis is the necessity for only one suture line. The chance of a leak is decreased by two-thirds. Just as important is the "straight shot" that the chyme is given with the end-to-end anastomosis. Late obstruction from dilated blind ends is eliminated.

Some surgeons prefer two-layer closures; others use a single layer. The advocates of single layers say there is little likelihood of causing stenosis at the suture line. This is a valid argument; however, the possibility of leakage with a single layer is greater than with a double layer of sutures. (Vascular surgeons will dispute this statement.) With interrupted sutures of fine material—5-0 or 6-0—a double-layer closure can be carried out without unduly compromising the lumen of the bowel. Some surgeons feel safer with two layers.

Decompression of the dilated proximal bowel is essential before anastomosis is undertaken. The use of needles, even large caliber ones, seldom accomplishes this. A pool or basket suction apparatus, placed directly in the bowel lumen, does a much more satisfactory job of decompression. In infants, as in adults with bowel obstruction, it is often wise to do a proximal jejunostomy or gastrostomy to insure adequate decompression for a few days in the postoperative period.

Postoperative Care

The attention and skill devoted to postoperative care is frequently a decisive factor in the survival of an infant. All too often everyone relaxes his vigilance following the exhilarating stimulus of the actual surgical procedure, and the infant deteriorates, more or less unobserved.

For instance, the care of tubes in infants is difficult. Because of their necessarily small caliber, meticulous attention must be given to keeping them open. Nasogastric tubes are too often neglected, either wilfully or through timorous, half-hearted attempts at irrigation. On the other hand, continuous wall suction attachments can be practically useless if they aspirate only gastric mucosa into the tubes.

Many surgeons are turning to gastrostomy tubes in infants, as well as in adults, to insure decompression in the postoperative period, while eliminating the respiratory and erosive complications of a nasogastric tube. Gastrostomy or jejunostomy drainage works well if the tubes are kept open.

The amount of fluid needed by an infant can be calculated on the basis of weight and can be given intravenously by way of the cutdown. The necessary electrolytes can be added to the solution for maintenance of normal, or correction of abnormal, electrolyte levels. Sodium, potassium, chloride and carbon dioxide levels are usually sufficient in the way of electrolyte determinations.

Some pediatricians recommend, arbitrarily, the discontinuance of a cutdown after 72 hours. If a catheter has been placed in the vein under sterile conditions, is working well and there are no signs of phlebitis, there can be no real objection to leaving the cutdown in longer. To be sure, it is devoutly hoped that the intravenous route won't be needed after two or three days, but sometimes it is.

Feedings by mouth are begun when

bowel sounds are established. Beta lactose solution is usually given first; if tolerated well, dilute formula, gradually increased to full strength, can be given over a period of a few days.

There is nothing more gratifying to the surgeon than the infant's first bowel movement after an intestinal resection. Although the baby cannot talk, this event speaks volumes, and everyone is greatly relieved.

Summary

The small size of an infant is a handicap that is accepted as normal by the pediatric surgeon. Most bowel resections in infants are emergency procedures. While exact diagnosis is always desirable, procrastination in the form of numerous diagnostic procedures or prolonged preoperative preparation cannot be condoned. Long tubes to decompress the bowel should not be used.

End-to-end anastomosis is preferable to the side-to-side technic for two reasons—multiple suture lines are eliminated, and the later complication of a blind end is avoided.

Meticulous postoperative care is a must in infants. Because of the small caliber of tubes needed for babies, particular attention must be given to these tubes in the immediate postoperative period to insure satisfactory decompression. Fluids and electrolytes for infants after bowel surgery can best be given by cutdown. ◄

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Physicians Have A Variety of Trusts

. . . The moral dignity of the medical profession is enhanced by the importance and variety of the trusts committed to it. The vastness of these trusts are seldom realized. They reach through the whole track of human existence. They often extend from germinal life to fourscore years. They are connected with the entire physical and moral development of man from infancy to adolescence, from that to manhood, from manhood to old age, from the "puling infant in its mother's arms," to the "soldier seeking the bubble reputation at the cannon's mouth," and onward, through all changes, until he is "sans eyes, sans teeth, sans everything."

A profession possessing the characteristics to which we have referred, must have an extensive and constantly increasing literature, which is necessarily influenced and moulded by the spirit of the age—by the existing power of thought—so far as directed to the consideration of its specific subjects.—E. Deming, M.D., "Address of the President before the Indiana State Medical Society," May, 1854.

Neurological Aspects of Sarcoidosis*

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BESNIER-BOECK-SCHAUMANN'S disease, benign lymphogranuloma, or simply sarcoidosis, is a systemic disease of unknown cause which is characterized by the development of small granulomas in almost any organ. Pinner[1] and Rostenberg[2] warn us to distinguish the term sarcoidosis, a disease, from sarcoid, an adjective. A sarcoid lesion may be secondary to a wide variety of diseases. The term "sarcoidosis" comes from Boeck who named the lesion for a fancied resemblance to sarcoma. Sarcoidosis is a systemic disease which has sarcoid lesions. Keeping these points in mind, one understands that the diagnosis of sarcoidosis rests with the clinician, not the pathologist.

As reviewed by Longcope and Freiman,[3] the history of sarcoidosis illustrates some of the confusing aspects of the disease. Jonathan Hutchinson in 1869 was the first to describe a patient with this disease. Actually, he described two patients, naming the condition Mortimer's malady after a woman who was afflicted with disfiguring facial skin lesions. In 1889, Besnier described lupus pernio which is characterized by a large, bulbous, violaceous nose, ubiquitously pictured in texts of physical diagnosis. Lupus pernio also is characterized by disfiguring lesions in the interphalangeal joints and has since been recognized as a form of sarcoidosis.

Caesar Boeck in 1899 described the histologic appearance of skin lesions and lymph glands. The real genius in the documentation of this disorder, however, was Schaumann, who in 1914, in his doctorate thesis, grouped all these various disorders under one name, benign lymphogranuloma, to distinguish them from malignant lymphogranuloma or Hodgkin's disease. Neurological aspects of sarcoidosis were recognized earlier by Licharew in 1908, who described a peculiar form of muscular wasting in a patient with lupus pernio, and Heerfordt in 1909, who coined the term uveoparotid fever. Even with the enlightening work of Schaumann, the subject seemed in later years to devolve into clinical and pathological chaos. A helpful step was taken by the National Research Council regarding sarcoidosis in 1948 when a definition of the disease was given.[4]

The many clinical syndromes of this condition are dependent upon the organ or tissue involved. The lungs, lymph nodes, eyes, skin and parotid glands are most commonly affected, but all systems have been implicated at one time or the other.

Most series, dependent upon clinical information, show the nervous system to be infrequently involved.[3, 6, 22] Actually, the central and peripheral nervous system and skeletal muscle are probably involved at sometime of the illness in closer to 30% of the cases,[5, 7, 8, 39] and perhaps even more.

Etiology: The cause is unknown. Once tuberculosis was implicated but more recently other views are favored.[2, 9, 10, 11, 12] Rostenberg[2] in 1951 disputed the accepted view that sarcoidosis was merely a form of tuberculosis and concluded that the cause was unknown. It is possible that sarcoidosis may not be an etiologically pure condition but represents rather a hypergic syndrome from many causes. Whether it remains local (as in a sarcoid lesion) or systemic (as in sarcoidosis) depends upon the provocative noxa. This conclusion is speculative, however, and further conjec-

* This paper was written while the author was a member of the Neurology Department at Indiana University Medical Center. The patients discussed were treated there.

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ture on the subject in this paper is unwarranted.

Pathology: Histologically, the characteristic lesions consist of collections of large, well defined, epithelioid cells with abundant palely staining cytoplasm.[13] These cells become enlarged and multinucleated. Giant cells are seen. Frequently these cells contain polymorphic inclusion bodies. The cytoplasm may be vacuolated. The cells accumulate in small granulomas which never show caseation and seldom if at all necrosis. The granuloma is surrounded by a peripheral margin of lymphocytes, plasma cells and occasionally eosinophils. In addition, hyalinization and amyloidotic material are sometimes present.[9] The lesions never invade and organisms cannot be cultured from the tissue unless secondary infection has occurred. The lesions frequently become fibrotic and sclerotic and are then thought to be irreversible.

Incidence: Sarcoidosis may occur at any period of life, but is most common between the ages of 15 and 40. The youngest patient was Berger's,[14] a nine-month-old infant. A three-month-old infant was originally diagnosed as sarcoidosis (Naumann[6]) but was later thought to be Letterer-Siwe's disease.[16] In this country the disease has a curious predilection for the Negro. The reason is controversial, but many theories are offered.[10,15] The sexes are equally affected.

Neurological Symptomatology: The cranial nerves are the most common site of neurological involvement. Possibly sarcoid lesions are deposited in the nerve itself but this has never been histologically confirmed.[16] Uveoparotid paralysis, a triad of uveitis, parotitis, and complete facial palsy, is seen in about 16% of patients with sarcoidosis.[16,17] The complete facial palsy frequently precedes the parotitis and if associated with ageusia must affect the VII nerve proximal to the parotid gland. Other neurological complications also seen in uveoparotid fever are other cranial nerve palsies, peripheral neuritides, diabetes insipidus, hypersomnia, pyramidal tract signs, ataxia, nystagmus and delirium.[3,6,7,17]

Facial palsy frequently occurs without the syndrome of uveoparotid fever. Any other cranial nerve may be involved in the following order of frequency: X, IX, VIII, III, V, VI, IV and XI.[6,19] The following case illustrates cranial nerve involvement without a demonstrable clinical syndrome of uveoparotid fever.

Case Summary No. 1

A 50-year-old colored female had a sudden onset of headache followed by complete facial palsy and ageusia on the left. Twenty-one days later she had a right lateral rectus palsy, and 30 days later a right inferior rectus palsy which quickly subsided. Previously she had been thought to have rheumatoid arthritis. In addition, she had had a thyroidectomy for reasons which were not medically documented, and had been treated for hypertension. The clinical impression of sarcoidosis was supported by a scalene node biopsy which revealed the typical histological changes of sarcoidosis. The patient was placed on isoniazid and corticoids with some improvement. The facial palsy persisted however.

Pupillary abnormalities are difficult to assess because iridocyclitis is so frequent. Argyll Robertson pupils have been reported.[6] Of special interest is a patient with Adie's syndrome reported by Lewis[20] in 1941. Other ophthalmic conditions in addition to uveitis and iridocyclitis are optic neuritis, optic atrophy, central scotoma, swelling and hyperemia of the discs, ocular fundi venous engorgement, blepharoconjunctivitis, dacryoadenitis, chorioretinitis, perivasculitis and choroidal atrophy.

Peripheral Spinal Nerves: Any of the peripheral spinal nerves may be affected alone or in combination with other peripheral or cranial nerves. Most commonly, the patients demonstrate single or multiple mononeuropathies,[6] presumed to be secondary to sarcoid deposits in the nerve itself, although conclusive histological confirmation has never been made.[16] One may assume by reading the case reports that peripheral polyneuritis is less frequent. This is probably not so. The fact that polyneuritis does exist argues against mechanical factors alone being the cause of the neuro-

logical deficits. It is the author's conviction that an unknown toxic or metabolic effect is also present.

Intracranial: The effect is of two types depending on the location of the lesions.[21] Meningeal infiltration gives symptoms which are secondary to compression on the brain and neighboring structures such as the cranial nerves, the pituitary stalk, the optic chiasm and the major blood vessels. Usually the lesions are found diffusely in the leptomeninges but may occur as large dural masses in the form of "giant granulomas." The giant granulomas are not single granulomas but are accumulations of many small granulomas in one area. Most commonly, the so-called "meningitis" affects the base of the brain. In Colover's series of neurologically affected patients, the most frequent condition seen was diabetes insipidus (20-25%).[6] Other pituitary syndromes have been reported.[3, 6, 21, 22] An example of this neurological complication is illustrated in the following case.

Case Summary No. 2

A 36-year-old colored male had a 12 year history of sarcoidosis involving the lymph nodes, lungs and hemopoietic system. The clinical diagnosis had been supported by multiple lymph node biopsies which showed sarcoid granulomas. In addition, he had panhypopituitarism manifested by hypothyroidism, hypogonadism and hypoadrenalism. He had sudden onset of right hemiparesis, right central facial palsy and right-sided extensor toe sign. Occasionally he had had episodes of dizziness, staggering and incoordination. An electroencephalogram was suggestive of a deep-seated midline lesion.

Intracerebral sarcoid deposits occur less frequently. The hypothalamus and the pituitary have been implicated in several case reports.[6] More interesting and much rarer are case reports of large neoplasm-mimicking intracerebral granulomas. In 1947, Everts[23] described an occipital lobe tumor which turned out to be a "giant granuloma." Erickson, Odom, and Stern[24] have described a tumor located in the tonsils of the cerebellum. Several other authors[16, 25, 26, 27, 28, 29] have described intracerebral involvement. Even rarer is diffuse intracerebral sarcoidosis as described by Cares, Gordon, and Kreuger.[30] Lesions were limited almost entirely to the white matter of the cerebrum and in the vessels, mimicking a demyelinating encephalopathy both clinically and pathologically.

An added argument for a generalized metabolic disturbance secondary to systemic sarcoidosis are the 14 cases of acute and subacute encephalitis-like syndromes associated with sarcoidosis described by Zeman.[16] No histological confirmation from the brain has been made.

Intracranial involvement mimics other controversial conditions which the author will simply mention: Pseudo-tumor cerebri and chiasmatic arachnoiditis and may be one of the causes for these disorders.

Spinal Cord: Five cases of proven spinal cord sarcoidosis have been reported; all have had meningitis but only four had an additional myelitis (Wood and Bream, 1959).[31] Sarcoid lesions of the vertebral bodies have been proven in three patients (Goobard and associates, 1961).[32]

Skeletal Muscle: Sarcoidosis frequently involves muscle.[39] The heart[33,34] and the uterus,[35] surprisingly, are not rare areas of involvement. There are, however, rarely syndromes of skeletal muscle sarcoidosis resembling progressive muscular dystrophy.[36] In these patients chronic polymyositis is a better term to describe the disorder. The following patient illustrates the chronic polymyositis occasionally seen in sarcoidosis.

Case Summary No. 3

This 38-year-old Negro* had a 15 year history of sarcoidosis. Typical sarcoid lesions were evident on several histological examinations. A diagnosis of tuberculosis had been made on the basis of one positive tissue culture for acid-fast bacilli from the rectum. For approximately one and one-half years he had progressive difficulty in walking and muscle weakness. The muscles of the pelvic girdle and proximal muscles of the lower extremities were atrophied. Three electromyograms revealed character-

* Described in detail elsewhere.[36]

istic myogenic disease. A gastrocnemius muscle biopsy revealed many sarcoid granulomas. He was treated with corticosteroids in conjunction with anti-tuberculosis treatment and physical therapy. On this regimen he improved greatly both subjectively and objectively.

Laboratory: The cerebrospinal fluid, especially in patients with meningeal involvement, may show a high protein, a slight pleocytosis, primarily a first and sometimes a middle zone elevation of the colloidal gold curve, and curiously a decrease in sugar content (15 to 40 mgm%). To some,[8,22] the decrease in sugar content is added argument that sarcoidosis is an infectious process. Present-day methods for culture are never positive.

Hyperglobulinemia occurs, especially in the active phases of the disease. Leucopenia, eosinophilia, anemia, proteinuria, hematuria, cyclinuria, abnormal roentgenograms of the hands, feet and chest, blood sugar elevations, glucose tolerance curve abnormalities, high blood urea nitrogen determinations, especially if renal disease is present, are frequently seen. A high serum calcium, a normal serum phosphorus, calciuria and an alkaline phosphatase elevation may be present, but this usually points to renal or bone disease.[3] Creatinine and creatine is excreted in abnormal amounts when muscle disease is severe. Electromyograms, electroencephalograms, skull roentgenograms and contrast studies may be helpful, depending upon the site of involvement.

Diagnosis: The clinical picture is sometimes enough to suggest the diagnosis but histological confirmation is needed for certainty. Conversely, histological demonstration of sarcoid lesions is not adequate for a diagnosis of sarcoidosis. Muscle biopsies[37,38,39] and the Kveim reaction[40] are helpful in doubtful cases.

Differential Diagnosis: Tuberculosis, syphilis, leprosy, Hodgkin's disease, ascariasis, hookworm infections, beryllium poisoning, histoplasmosis, trichinosis, mumps, typhoid, Leishmaniasis, Torula, Brucellosis, lymphogranuloma venerium, coccidiomycosis and collagen diseases to name only a few, must be ruled out in doubtful cases of sarcoidosis. For those presenting with neurological signs and symptoms, the differential diagnosis may include all the possible causes of peripheral and central nervous system involvement. One should always suspect the diagnosis in patients presenting with bizarre and perplexing neurological signs and symptoms, particularly if there are also suspicions of systemic involvement.

Course and Prognosis: The course is benign, chronic and sometimes with remissions and recurrences. Secondary infections give added risk to untreated and corticoid-treated patients. Probably the main causes of death are central nervous system[3] and myocardial involvement.[34,41] Myocardial disease is much higher in patients with sarcoid lesions of the skeletal muscle.[41] Total remissions may occur spontaneously.

Treatment: Although corticosteroids have been tried in some cases with remarkable results,[42] the benefits have not been consistent. Occasionally total remissions occur with this treatment. The possible exception, where corticosteroids have been almost constantly helpful, has been in the muscle syndromes.[36] In some cases, concurrent anti-tuberculous therapy should be used.[36]

Summary

On the basis of three patients, and a review of the literature, the neurological manifestations and some general features of sarcoidosis have been discussed.

It is the author's conviction that an unknown metabolic disturbance produces some of the syndromes seen, such as peripheral polyneuritis, acute meningoencephalitis, and possibly some of the muscle syndromes.

It is stressed that the diagnosis of sarcoidosis rests with the clinician and not the pathologist. Nevertheless, because of the diverse mimicry of sarcoidosis for other diseases, histological confirmation is essential.

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An Easy Way to Remember The Anatomy Of the Brachial Plexus

Use Your Hand

MILTON TEPFER, M.D.*
Indianapolis

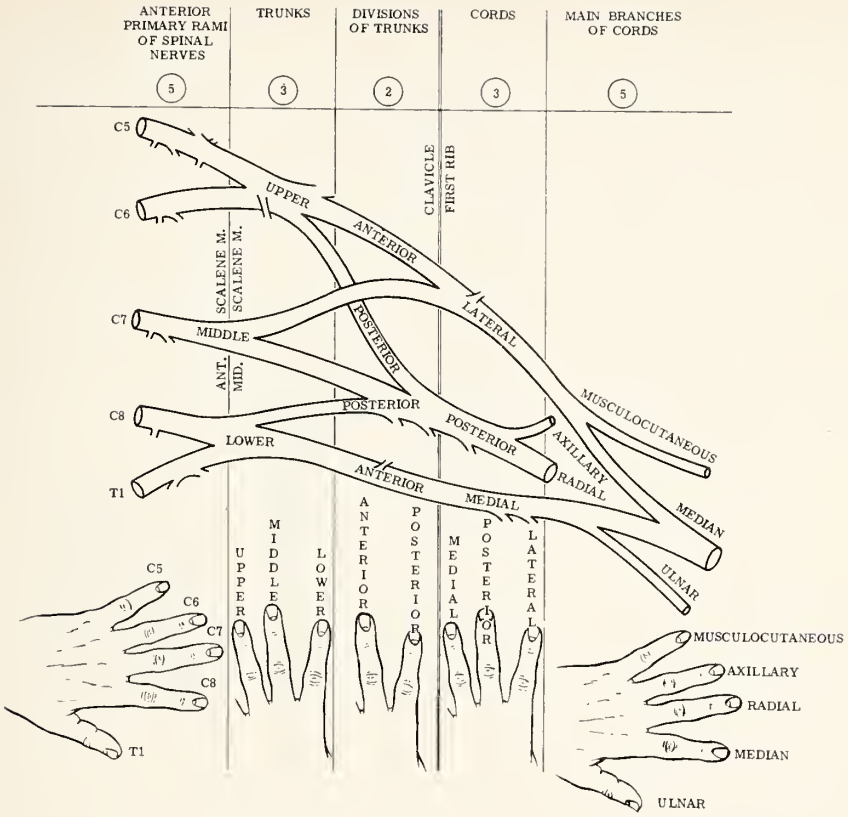
RECENT ARTICLES detailing the technic for administering an anesthetic block of the brachial plexus by the axillary method have shown it to be relatively simple with fairly reliable results and practically no complications.

Since the axillary approach to the brachial plexus obviates the possibility of pneumothorax, inadvertant stellate ganglion block, or the more unusual complication of phrenic nerve block, this method of anesthetizing the sensory, motor and sympathetic innervation of the upper extremity should lend itself more readily to use by the occasional anesthetist, general practitioner, or general surgeon who finds it necessary to repair upper extremity injuries.

Regional block anesthesia is particularly appropriate where the patient has recently ingested food or drink, in the elderly or debilitated patient, in children or in a mass casualty situation. The author, when he was a general practitioner, had cause to review the anatomy of the brachial plexus frequently, and he recalls that during that time he found it difficult to remember the anatomy of the plexus, its origin, formation and final distribution.

Recently, the subject of "Brachial Plexus Block" was my assignment for a lecture to a postgraduate group of part-time anesthetists. In order for me to again recall the anatomy of the brachial plexus without referring to notes, the following diagram and outline was prepared. After reviewing this diagram and outline three or four times, the anatomy of the brachial plexus was kept in mind longer than with any "system" used previously.

* Assistant Director, Department of Anesthesiology, Marion County General Hospital.



I. *Raats.* (5)—Let the five fingers represent the five main roots, — C5, C6, C7, C8, and T1.

II. *Trunks.* (3)—Let the middle three fingers represent the three trunks, — upper, middle, and lower.

III. Divisions. (2)—Let the index and middle fingers represent the anterior and posterior division in that order.

IV. Cords. (3)—Let the three middle fingers represent the three cords, — lateral, medial, and posterior.

V. *Nerves.* (5)—Call the main infraclavicular branches of the brachial plexus MUMAR:

Musculacutaneous
Ulnar
Median
Axillary
Radial

MNEMONICS

Identify the main posterior cord branches with RATS:

Radial
Axillary
Thoracodorsal
Subscapularis

Identify the main lateral cord branches with LLM:

Lateral Anterior Thoracic
Lateral Head of Median
Musculocutaneous

Identify the medial cord branches with MUMMI:

Medial Head of Median
Ulnar
Medial Antibrachial Cutaneous
Medial Brachial Cutaneous
Intercostobrachial

Thus, all of the important infraclavicular branches of the brachial plexus are easily recalled when "5, 3, 2, 3, 5" are brought to mind. ◄

The Case of Digressive, Diagnostic Diablerie

ARNOLD LIEBERMAN, M.D.
New York, N. Y.



DIAGNOSIS always precedes treatment; this truism is at the very basis of the *practice* of medicine. As students, we are drilled in the various diseases: we study, we learn about diagnoses almost by rote—direct and differential! When we graduate, we are glibly letter perfect—until we begin seeing patients who then confuse us by being "exceptional," "aberrant": let us be forthright! We err!

And the older we get, the more personal errors of both commission and omission become stored in our memories. We start out with arrogant brashness and gradually mellow into a riper, humility-tinged patient rapport. We don't insist on our snap judgments; we learn to *listen* even to the most garrulous of old ladies: we try to integrate *all* information into the biological portrait of a single individual, viz., the patient. And then we wind up *practicing* medicine—striving for but never attaining perfection.

At times, we do have successions of ego inflating scintillating accomplishments. But (inevitably) there comes the horrible failure: and a little child shall reveal the truth! However, I do think that Fate was less than kind when she brought Jen Ginn to the emergency room of the hospital on the very day that the senior resident was winding up the fifth year of his specialty training. He was to take his board examinations that were to certify him as being a finished product—well! Almost!

It started out like the most open and shut, childishly simple, completely routine, "no problem at all" sort of thing. Of course, that is the guile of these concealed traps—no cerebration needed! It was 9 a.m.; Jen was brought in by her anxious gym teacher. At 15, the girl was a very robust, rapidly maturing, quite pretty sophomore in the near-by high school. That very morning, Jen had come to school at the routine time. Her first period was physical education; the girls had changed to their gym suits and gone out to play. Jen had seemed "mad about something" and had kept sullenly quiet: totally unlike her usual, chattering self. They had been playing only a few minutes when a ball hit her on the head, she stumbled and fell very awkwardly. Said the instructor, "she could have struck the side of her temple against the ground—I'm not sure, but I don't think so."

Jen had gotten up and tried to go on

playing; however, her movements were awkward. "She sort of weaved and then just collapsed in a heap."

There were no marks of external injury. The girl could not be aroused although she did mumble vaguely when stimulated painfully. She seemed more rigid than limp: reflexes were rather lively and actual generalized tremors were observed. The skin surfaces were moist and pale; there was some salivary drooling. The eye-balls were firm; the pupils were equal but somewhat contracted. Blood pressure was normal, there was no fever. The heart rate was 105; the lungs were clear and there were no cardiac murmurs or irregularities. The abdomen was recorded as being normal to palpation and auscultation; the liver, spleen and kidneys appeared to be normal.

Routine x-rays of the skull were taken then and there; the resident also did a spinal tap which yielded clear fluid under normal pressure. Routine catheterization of urine was done and blood was drawn for emergency studies for sugar, acetone and urea nitrogen. The wet x-ray films failed to disclose any pathology; the urinary findings were absolutely normal: neither sugar nor albumen were present; microscopic examination showed only the usual few crystals and nothing else. Just about that time, the patient drew anxious attention to herself by having a series of sharp, generalized convulsions: the blood pressure rose and the heart accelerated. The stupor seemed to deepen!

Sisterly Assurances

Just then, the 12-year-old sister of the patient came rushing into the hospital. Jill had been notified and had come immediately; more history was obtained. Both parents were working; there was an eight-year-old brother also at classes in the nearby grammar school. Usually, all three walked together but, this morning, Jill had been detained at home and the other two had left home ahead of her. Also, "was this important?" She had taken her sister's jacket with her. In its pocket was an empty medicine vial: the label bore the name of the children's mother; it read,



". . . just collapsed in a heap."

"Take one only at night, if needed for sleep."

Further questioning was unrevealing, "Mother did take some pills for nervousness;" the family was very healthy; nobody was ever sick, to her knowledge. No! nobody took anything else! Jen was very lively; in fact, she had been on a special date just the night before with a heart-throb on whom she had a real crush. She had come in after Jill was asleep!

The senior resident was going into the matter very thoroughly. That very week he had monitored our weekly seminar on the topic of COMA. He had started by putting on the board a famous student acrostic and then going down the list, item by item.* As the neurosurgical resident was being called, the director of the laboratory put in a personal message, "would you,

*S—kull fracture, etc. middle meningeal, subdural, epidural hemorrhages, etc.;
A—poplexy: cerebral and other vascular accidents;
M—orphine, barbiturates, other drug and physical agents;
A—lcohol: the ethyl variant, usually;
S—unstroke;
U—remia: diabetic (hypoglycemia, hyperglycemia), nephritic, hepatic, etc.;
M—eningitis, various infections, etc.
E—pilepsy, focal seizures from tumors, eclampsia, etc.

All too long ago, I was taught it by the proctor in medicine; each generation passes it on to the next. It is handy and has the additional merit of the very first four being the most common reasons for unconsciousness. . . .

please, draw another blood sample for a sugar reading? We got a reading of only 50 mgs. by the Folin-Wu method; our technician is brand new and we would like to check so low a figure."

As the resident wanted to check Jen also for possible drug overdosage, he was glad to oblige. The nurse had called the pharmacy whose label was on the empty pill bottle; she relayed the message that Jen's mother had had 30 100 mg. phenobarbital tablets in the bottle. . . . Jill had assured the doctor that she had seen her mother give the *empty* bottle to Jen that very morning—still, he wanted to be sure. The 12-year-old girl was positive but—there was no harm in checking the story.

Jen had been in the emergency room only a very short time—the doctors were really wasting no time—still, the patient was demonstrating rapid, alarming deterioration! The convulsions resumed and respirations ceased. Intubation and swift use of the respirator staved off the ultimate disaster; however, the intern kept his stethescope on her chest to be ready to apply external cardiac massage should that necessity arise.



"I've just GOT to talk to the doctor—I just gotta!"

"Une Piqûre" for Pique!

It was at this juncture, that the Bennett Intermittent Positive Pressure machine was wheeled in, and connected to the intubation tube. One of the older medical attendings was going by on an unrelated mission; he paused to take in the scene of humming activity. As he was standing in the door, a boy of about eight careened into him. The lad had broken away from an orderly who had tried to prevent his entry into the room. "That's *my* sister over there on the table! I've just GOT to talk to the doctor—I just gotta!" He was sobbing and screaming all at the same time. The old doctor put a kindly hand on the distraught youngster's shoulder, "Talk to me, sonny! Just what must you tell the doctor?"

The soft voice and the gentle touch snapped the mounting near hysteria consuming the boy. "Well! You see, she and I walked out of our house together just a couple of hours ago. She told me that she had had a fight with her boyfriend the night before and that they had broken up; she was really mad! And then we stopped at the Jenkins house down the street: Jen gives the old lady her shot every morning! I don't know what its for—sugar sickness —or something! Anyway, she gave the shot and then went to the kitchen to put the stuff away and then—all at once, she took the tube, filled it up full and jabbed herself; yeah, so help me: right in her own shoulder! I was scared and screamed at her not to do it but she said, 'I'll get really sick and THEN will Georgie be sorry!' "

Having gotten all that out of himself, almost in one breath, the brother broke down and started weeping and howling again: "Thanks for telling us, young man; you don't know how much you have helped your sister." The alerted attending went into the examining cubicle after telling a hovering nurse to get, and pronto, 50 cc. of 50% glucose ready in a syringe. He watched briefly even as the chief resident was in the

process of drawing that second blood sample, "Ah, there, doctor! While the needle is inside the vein, why don't you start an I.V. infusion of glucose and then change to whatever is needed? Here, switch to this syringeful." The harassed resident looked up startled as he had not seen the unobtrusive entrance of the older man. The tactful suggestion was gratefully accepted and so the glucose went into Jen Ginn's vein. A miraculous improvement set in almost immediately. Within minutes, respirations became spontaneous and almost normal—well, anesthesiology got kudos for that. But, in addition, within something like 10 minutes the nearly dead girl was conscious: she was talking as soon as the tube was withdrawn from her larynx!

The second blood sugar gave a repeatedly checked reading of only *20* mgs. of sugar! No one in the room had heard the dialogue between the little boy and the attending physician. However, the latter permitted himself to be acclaimed for only a short time. He was a just man and too old for vanity: but the teaching point was too good to conceal. As we said at the beginning, "a little child shall reveal the truth!" Of course, there had to be the receptive mind at hand—and the busy physician who just had to pause and LISTEN!

Certainly, the little brother got an extra Boy Scout merit badge and a hero's welcome at home. Jen Ginn had been taught a good lesson (we hope) ; her parents were too thankful to do any scolding. The chief resident will surely have an anecdote that he will be retelling all his life. The acrostic on coma *was* vindicated: after all, blood for sugar was drawn not once but twice! Digressive, Diagnostic Diablerie was thwarted! Error preceded the revelation of truth; virtue was triumphant—no better time for Old Pepys to pause and close his diary for the day. ◄

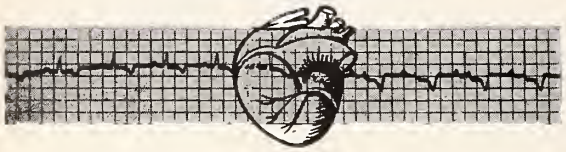
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Unsung Heroes of Drug Research

Someone ought to devise a salute to mice and monkeys, rabbits and rats, and all the other actual and eponymic guinea pigs of the animal world. Without them, pharmaceutical research would grind to a halt. Either that, or it would be transformed from a scientific pursuit into a deadly gamble. . . .

The fantastic progress made in pharmaceutical chemistry since 1930 has been due in large measure to the availability of the unsung heroes of the living world: experimental animals. Editorial in *Journal of the Medical Society of New Jersey*, September, 1963.

Electrocardiogram of the month



Presented as a regular feature of The JOURNAL, Electrocardiogram of the Month is a series of short talks on cardiovascular diagnosis and treatment, edited by the staff of the Krannert Heart Research Institute, Marion County General Hospital and the Department of Medicine, Indiana University School of Medicine, Indianapolis.

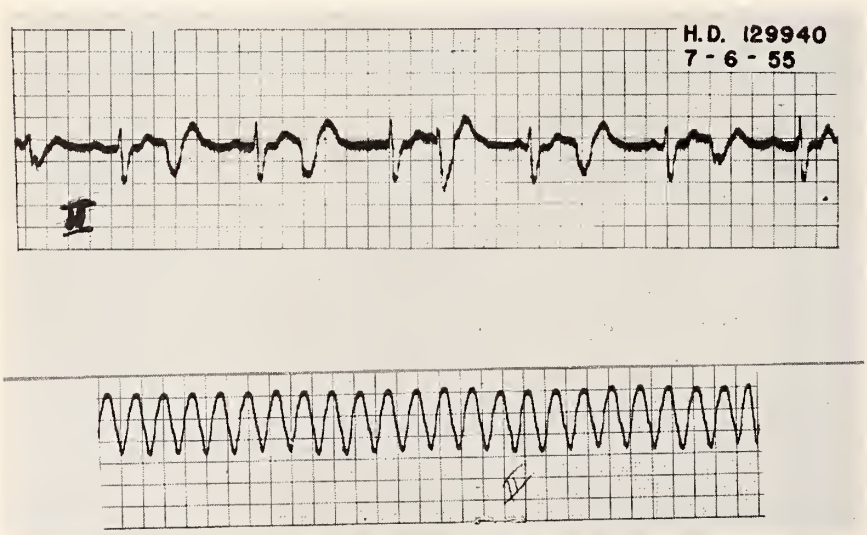
Atrio-ventricular (A-V) Dissociation and Ventricular Bigeminy Due to Digitalis Intoxication

CHARLES FISCH, M.D.
Indianapolis

THIS PATIENT was admitted for the treatment of acute pulmonary edema secondary to hypertensive heart disease. He received unknown amounts of digitalis prior to admission to the hospital. When first seen he was given 0.8 mg of Lanatoside-C intravenously.

The cardiogram showed evidence of severe digitalis intoxication. The P waves are distinct with a P-P interval from 1.16 to 1.32 seconds and a regular R-R interval of 1.28. There is no relation between the P and QRS complexes indicating an A-V dissociation with the atria being controlled by the S-A node (P waves) and the ventricles by the A-V node (e.g. second QRS complex). Each A-V nodal QRS complex is followed by a ventricular premature coupled by an interval of 0.44 seconds.

Although the premature beats are accurately coupled to the preceding QRS, they vary considerably in appearance. Their accurate coupling indicates unifocal origin despite varying appearance but with alternate routes of activation of the ventricles. Such ventricular premature beats are nearly always due to digitalis intoxication. Continued administration of digitalis leads to development of ventricular tachycardia.



UPPER STRIP shows the A-V dissociation and unifocal ventricular ectopic beats, accurately coupled but varying in appearance. Ventricular tachycardia resulted from continued administration of digitalis.

X-RAY CONFERENCE

Presented as a regular feature of *The Journal*, X-ray Conference is a series of short talks on procedure and radiologic diagnosis, edited by Erich K. Lang, M.D.

Accessory Spleen Shown by Chromium 51 Scintigram

*ERICH K. LANG, M.D.**
Indianapolis

THIS 60-YEAR-OLD colored male was admitted to the Vanderbilt University Hospital with a diagnosis of malignant hypertension. A renal arteriogram revealed no evidence of renal artery stenosis, however a faint vascular blush was seen in the left suprarenal area. It was the impression of the reader that this area was supplied by radicals of the splenic artery.

A subsequent retroperitoneal air study classically demonstrated a lemon-sized mass in the left upper abdominal quadrant. The mass was thought to be either retro- or intra-peritoneal. Hormone and biochemical assays failed to show any evidence of an active adrenal-cortical or adrenal-medullary tumor. The mass was felt to represent an accessory spleen.

A chromium 51 red cell sequestration study was carried out. The scinti-scanogram revealed concentration of the sequestrated red cells in the area of the described mass, thus definitely determining that this mass represented an accessory spleen.

Intraperitoneal air studies and particu-



FIGURE 1

NOTE THE ROUNDED lemon-sized mass medial in the left upper abdominal quadrant. The retro-pneumoperitoneum suggests that this is an intra-peritoneal mass connected with a broad stalk to the retroperitoneal space.

* Radiologist, Methodist Hospital and Assistant Professor, Vanderbilt University, Nashville, Tenn.

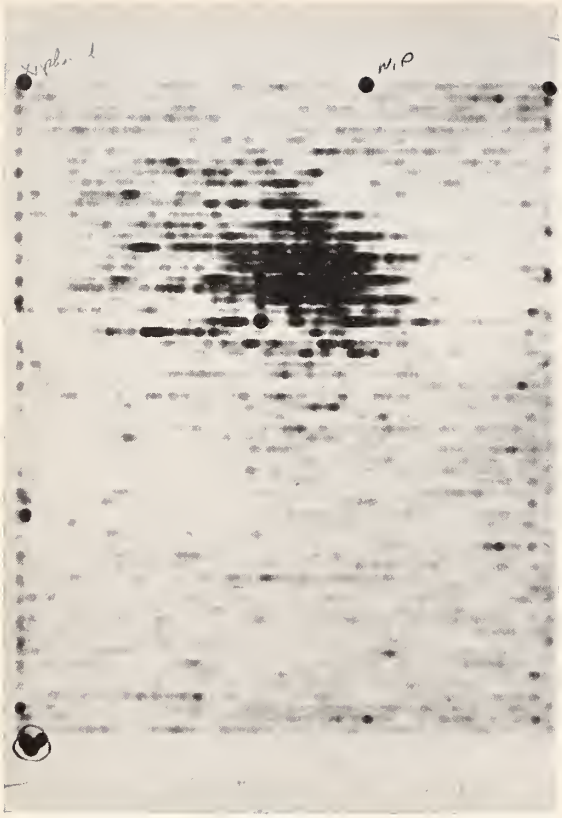


FIGURE 2

THE SCINTI-SCANOGRAM reveals activity far medial to the nipple line. If this scinti-scanagram is superimposed an the retroperitoneal air study the activity averlies the area of the demonstrated mass, thus clearly identifying it as an accessory spleen.

larly arteriograms will usually suffice to ascertain the diagnosis of an accessory spleen. The blood supply of the accessory spleen is almost always from the splenic artery, thus differentiating this structure from a suprarenal gland or chromaffin tumor in this area which would have a separate vascular supply.

However chromium 51 red cell sequestration studies will allow a definitive identification of the spleen and any accessory splenic tissue. Red cells are first washed and tagged with chromium 51. The cell membrane may be slightly damaged by warming the red cells prior to reintroduction into the circulatory system. This will facilitate sequestration of the damaged red cells in the spleen.

Twenty-four, 48 and 72 hours after introduction of the damaged red cells a scinti-scanogram over the left upper abdominal quadrant will reveal concentration of the radioactive material (chromium 51). The scinti-scanogram may be superimposed on a flat plate of the abdomen and shadows in the left upper abdominal quadrant may thus be identified. ◄

Hang Together—Or Else

It will be only by constant vigilance and by constant public education that a climate of competitive private enterprise, a climate nurturing incentive with the profit motive, can be maintained in both medicine and the drug industry. Both groups have so much in common in the struggle to prevent strangulation by Federal bureaucracy that it behooves each to support the other.—John S. DeTar, M.D., in *Medical Economics*, Jan. 28, 1963.

The Journal
of the INDIANA STATE MEDICAL ASSOCIATION

Devoted to the interests of the medical profession of Indiana

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Coronary Victims Are Insurable

CORONARY DISEASE, along with almost all other ills, is associated with a high order of unpredictability. However, life insurance actuaries have found that when coronary disease is studied on a clinical basis its course can be prognosticated reliably enough to allow the issuance of life insurance to certain of the survivors of first occlusions.

Miss Annie Mary Lyle, senior underwriting research analyst of the Prudential Insurance Company, reported on a recent study of coronary disease as an underwriting problem and came to the conclusion that it is possible to select the best of the group and bring the mortality within customarily acceptable limits for insurance.

It has been demonstrated that the patients who may be considered for insurance are those who, within six months after an occlusion have made a clinical recovery and have returned to work. A waiting period longer than six months, even up to two and three years, does not add much information of an actuarial nature, if clinical recovery has been accomplished and the patient is working.

Other conclusions of a prognostic value were that individuals with angina pectoris after a coronary occlusion have no higher mortality than those without angina; and when the blood pressure is normal after an occlusion, those whose blood pressure was elevated before occlusion have a substantially higher mortality than those whose pre-occlusion blood pressure was normal.

It was also verified that individuals with coronary occlusion associated with any other cardiovascular impairment or diabetes suffered a high mortality rate, as did those who had had two or more occlusions.

It was also noted that, regardless of the survival time, the majority of patients who had an occlusion sooner or later died of coronary disease.

The Right Decision

LOWELL T. COGGESHALL, M.D.*
Chicago, Illinois

EIGHT YEARS AGO, the Salk vaccine was first introduced as a public health measure. At that time, Salk had the background of knowledge which came from years of virus experimentation coupled with the confidence and courage to take the broad leap [from animal] to man.

Yet there were many objectors. Critics were numerous and vocal. The excellent evaluation program of the Francis Committee, truly one of grand design, was stated by some not to have proved their conclusion that the vaccine was ready for mass use. The National Foundation was held to be too extravagant, and it was claimed that polio was not sufficiently prevalent to warrant all the time and money expended.

There were, indeed, many critics, as there should be; but their comments did not delay necessary action. If the few cases of polio that occurred as the result of an improperly inactivated batch of virus had resulted in the delay of the polio vaccination program just one year, there probably would have occurred, based on the 1951-53 averages, over 43,000 cases of polio, with over 26,000 of these paralytic cases, which were avoided by prompt use of the vaccine. The incidence of this disease has now dropped from over 50,000 cases annually to less than a thousand.

Nearly a decade later, the thalidomide crisis has resulted in new legislation and rigid regulations, all aimed at protection of the public. As in the polio situation, the question of the proper period of delay in introducing public health measures and new drugs arises. If the government scientists and regulators will work cooperatively with the university and industrial scientists as they did at the time of the polio crisis, we will all be better served. But if the rigid controls are exercised by government scientists who are timid about decisive action and who insist upon noncontributory tests, the delays that we may experience, in the present climate, will be far more costly than the prompt use of life-saving compounds in man.

If the government assumes the role of final judge for the toxicity and efficacy as the new law now requires, then it must equip itself with facilities and adequate manpower to act promptly and decisively. The object lesson of the polio vaccine is that there are even greater penalties if new preventive or life-saving compounds are not promptly utilized. — Reprinted from *Progress in Health Services*, Vol. XII, No. 4, Sept.-Oct., 1963.

* Dr. Coggeshall is vice-president of the University of Chicago on special assignment and has recently become associate director of Health Information Foundation of the university.

Indiana *Is* Helping India*

THE COMMANDMENT "Thou shalt love and serve one another" has certainly been proven true in Indianapolis and over all the great state of Indiana. Thousands of people have lent an ear and then responded to such a call in the past three years. They include doctors and dentists and their wonderful wives, hospital superintendents and administrators, nurses, opticians and optometrists, drug manufacturers and druggists, surgical supply houses, pastors and congregations, church classes and circles, lumber yard owners, trucking concerns and just plain people. The results of prayer and 87 talks to various groups have been very gratifying.

* "Can't Indiana Help India?" an editorial outlining the medical needs of the mission hospitals in India appeared in the December, 1961 *Journal*.

A large medical dispensary and staff quarters have now been built, adjacent to the church grammar school at Kamalnagar, Mysore State, India, to which six or more cottage wards are soon to be added. A tiny leprosy dispensary 11 miles away at Udgir will soon be enlarged to become a comprehensive leprosy treatment laboratory and surgical center.

More than $300 toward the installation of a well pump, Diesel generator and wiring for electrification of the Kamalnagar school and dispensary compound ($5,000.00 total needed) is well on its way. Eight or more grammar school scholarships have been arranged. Collected by our medical auxiliary locally and over the state, a four ton shipment of beds, appliances and instruments left Indianapolis for Kamalnagar in May 1962, and presently in the gymnasium of Broadway Methodist Church is a second six and one-half ton shipment boxed and ready to go.

Also early this year seven tons of material went to World Medical Relief Warehouse, Detroit (Mr. and Mrs. L. G. Auberlin) to be scattered to doctor-sponsored hospitals or health centers of all creeds all over the world; two and a half more tons are soon to be forwarded to Detroit.

The basement gymnasium of Broadway Methodist Church will be open for collection material until early January, and the ladies will again make a second collection in the next few weeks. Be ready to help. You will be happy you did. Your help means so much.

The shipment to three Indian hospitals so far has included 24 hospital beds, cots or cribs, 9000 pairs of complete spectacles and 2000 frames, 200 pairs of framed cataract lenses, more than $1,000 worth of multivitamin tablets and baby foods, 300 pounds of homemade bandages and leprosy



BEDS DONATED by Methodist and St. Francis Hospitals, Indianapolis, arrive at Kamalnagar. Left to right, outside the Nurses Quarters are Rev. Paul Wagner, Dr. W. Burleigh Matthew, Mrs. Wagner and Mrs. Matthew.

dressings, 750 pounds of orthopedic appliances, more than 250 medical and nursing books and many periodicals for libraries of the three hospitals, examining tables and medicine cabinets, surgical lights, BMR's, diathermies and countless instruments and syringes.

The nurses in the eye departments of all Indianapolis hospitals are saving eye sutures. Also it has been arranged for complete furnishing of an ophthalmic grinding laboratory for the Holston Hospital in Mysore State. At present an effort is being made to secure a cast-off x-ray machine for the hospital at Bidar.

Our grateful expression of thanks goes to thousands of contributors and well-wishers. And especially do we want to say "God bless you" to the Woman's Auxiliary of Marion County and adjacent county societies who gave so much of their precious time and selves to the effort.

The delivery address at Broadway Methodist Church is 609 E. 29th St., Indianapolis. We are very grateful that we have had this collection center.

Sue and Burleigh Matthew,
Indianapolis

Editorial Notes . . .

X-33 Water Repellant, an inflammable masonry water proofer, has been indicted in several FDA releases as dangerous. Eight injuries and two deaths have resulted from X-33 fires and explosions this year. FDA now alerts everyone to return the material to the dealers. The original product had a flash point of 40 degrees below zero. The new product sold in 1963 has a flash point of 73 degrees above zero. The

labels do not distinguish the two forms. FDA cautions against attempting to destroy or dispose of the material without first consulting the fire department.

Regular medical expense insurance (pays for doctor calls and other nonsurgical care) is growing rapidly. Persons covered have increased from 35 million in 1952 to 98 million in 1962. In 1952 four out of 10 persons with hospital insurance also had regular medical insurance. Despite the fact that in 10 years 50 million more Americans acquired hospital insurance, almost seven out of every 10 persons with hospital coverage have regular medical coverage also.

Dr. Kenneth G. Kohlstaedt, Indianapolis, has been appointed chairman of the Subcommittee on Wider Scale Trials on General Basis of the Commission on Drug Safety. The Commission now has 17 subcommittees to study and make recommendations concerning all aspects of drug safety.

Fire loss in 1962 was 11,800 lives and $1.6 billion in property. The property loss was the highest on record. Hospital fires declined by 100 (total 1,200) and fires in nursing homes increased by 100 to 600. Principal causes of fires were careless use of smoking materials, electrical defects, defective and misused heating and cooking equipment, mishandled flammable liquids and rubbish.

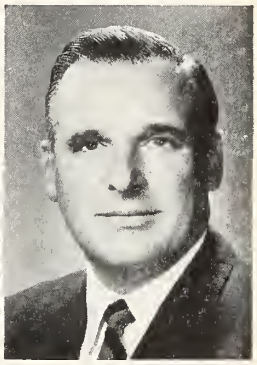
The high cost of employees and everything else a hospital uses is the biggest problem a modern hospital has. The high cost of personnel to keep operating rooms open every day results in expensive equipment standing idle. This despite the fact that the best way to use expensive equipment from a monetary standpoint is to keep it busy all the time. A large hospital in Nebraska has instituted a seven-day hospital schedule, operating rooms included. The scoop is that the overall costs have not gone up, and the cost per patient has gone down. ◄



The editor and the staff of The Journal wish you all a Very Merry Christmas and a Peaceful, Happy New Year

President's Page

It is evident from the present tempo, activities in the Indiana State Medical Association are off to a fast and effective beginning. Our Commission on Governmental Medical Services and its sub-committee on Mental Health have just concluded a series of six regional meetings as a follow-up of the American Medical Association Congress on Mental Health and the Indiana State Medical Association Congress on Mental Health. The purpose of these meetings was to explain the responsibility of the local community in the development of a revised and more effective mental health program for the state of Indiana.



The main responsibility for the development and implementation of mental health care programs and mental health facilities are, in the end, going to revert to the local community and it is hoped as a result of these regional meetings, the component societies of the Indiana State Medical Association will assume leadership in development of local research and planning committees. These local committees in turn will be involved in the regional planning and in future development of a statewide program. One of the important parts of these regional conferences was the explanation of the planning which will be done for mental health and also the planning envisioned for hospitals.

Following along this line, and as a result of the recommendation made by last year's president, Doctor Glock, a planning committee has been appointed to review and to plan the future activities and goals of the Indiana State Medical Association. The intent is that this committee will take stock of what has been accomplished and attempt to develop recommendations for goals to be accomplished in the future by the association.

The State Medical Association has also sponsored its second statewide Conference on Aging under the direction of the Commission on Aging. The meeting was attended by approximately 150 individuals interested in developing some plans for the use of hospital facilities by nursing homes for more efficient care of the aged. While this meeting was largely under the direction of the association committee, it also included other members of the Joint Council on the Care of the Aged, which is comprised of dentistry, nursing homes and hospitals, in addition to medicine.

As this page is being prepared for publication, the House Ways and Means Committee is holding its public hearings on the King-Anderson Bill. Many attempts have been made by the Administration and the proponents of this type of legislation to pack these hearings with testimony favoring the King-Anderson approach. It is interesting to note that two members of the President's cabinet reluctantly admitted, in cross-examination, that it may be necessary to further delay the implementation of this program due to the critical situation in regard to the national budget and funds necessary for defense and other existing government programs.

We all have a busy and very critical year coming up in 1964. It is my sincere hope that as we start the holiday season we will all re-dedicate ourselves to assuming our full responsibility in the effort which will be required during the coming months to preserve our way of life.

May all of you enjoy a happy and fruitful holiday season.

Donald E. Hood

The Woman's Auxiliary

REPORTS TO ISMA

Although our fiscal year does not end until April 30th, we pause during the final days of the calendar year to review our program, and evaluate the unfinished services we had planned, in terms of growth and progress.

The interest shown by the county representatives in the reports of the state chairmen at the Board of Directors meeting during the state convention was most rewarding to all chairmen. The spirited discussion following each report, in which everyone participated, is proof that the chairmen are doing their job full well.

There was one important service accomplished this year which is a service for our own members. For a long time we have needed a handbook of procedures to be used as a guide for officers and committee chairmen and written especially for our own auxiliary. This handbook was compiled by Mrs. Hubert Goodman and Mrs. Frank Gastineau after many hours of study and thought, and the preface reads: "The purpose of this handbook is to acquaint the leaders of the Woman's Auxiliary to the Indiana State Medical Association with the responsibilities and privileges of their office and chairmenship. It is not intended to stifle the initiative of any individual, but rather, to define the limits within which officers and chairmen are authorized to proceed in developing their respective parts of the program, without seeking further approval. Expansion of established programs, and the addition of new ones are essential to the growth and development of the auxiliary. These may be initiated by an individual, an official auxiliary body, or on recommendation of the Indiana State Medical Association, but must be approved by one of the auxiliary governing bodies and the State Medical Association Advisory Committee before being incorporated into the Auxiliary program."



The duties and responsibilities of the officers and committee chairmen are clearly defined, as are the policies and procedures used for determining reimbursement for authorized travel expenses. This handbook will prove to be a valuable aid to all newly elected officers and appointed chairmen at the beginning of our fiscal year in the orientation of our programs, without a break in the continuity of any auxiliary program.

May the spirit of Christmas reign through the year in our dedication of service to others.

A MERRY, MERRY CHRISTMAS to YOU and YOURS and Best Wishes for a Peaceful, Joyful and Rewarding New Year.

Zelda K. Sullivan



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Memo to Members on Income Taxes

TAXPAYERS who are reporting on a cash basis might consider planning ahead for revisions in income tax rules which are expected to become effective January 1, 1964 (the tax bill has yet to pass the Senate). If the bill becomes law in its present form, the rates for individuals will be lowered, and it may be possible for the taxpayer who reports on a cash basis to reduce his tax bill by paying as many of his expenses as possible in 1963. Some explanations follow:

Deductible Expenses—1963

1. The cost of all supplies purchased and paid for in 1963 is deductible.

2. Charitable contributions and church pledges paid before the year-end.

3. Remodeling and maintenance work on income producing property done and paid for in 1963.

4. A gift to a charitable organization of property, if completed and title is delivered (though it may be arranged to retain possession of the item for an agreed upon period of time).

5. All property taxes and interest paid in 1963.

6. Medicine and drugs are treated as medical expense only to the extent that they exceed 3% of the taxpayer's adjusted gross income, except that where the taxpayer or his spouse is 65 years or over, amounts in excess of 1% of his adjusted gross income are deductible. Beginning with 1964, the 1% floor would end for those 65 or older persons and their spouses. Therefore, the rate on these items in 1964 will be lowered.

Income

The tax bill would reduce individual tax rates from the present 20%-91% range to 16%-77% schedule for 1964 and to a 14%-70% scale for 1965 and thereafter. Below is summarized a comparison of the present and proposed tax rates for married taxpayers:

	Present Tax	Proposed Tax	
Taxable Income	1963	1964	1965
$ 8,000	$ 1,680	$ 1,480	$ 1,380
12,000	2,720	2,420	2,260
16,000	3,920	3,500	3,260
20,000	5,280	4,720	4,380
24,000	6,800	6,080	5,660
28,000	8,520	7,580	7,100
32,000	10,400	9,220	8,660
36,000	12,400	11,000	10,340
50,000	20,300	18,130	17,060
100,000	53,640	47,880	45,180

Beginning in 1964, those taxpayers who are 65 or over won't have to pay capital gains tax on gains realized from the sale of their homes to the extent of the profit on $20,000 if they have lived in the house five years or more.

The new tax law plans to create another class of assets, namely, Class A (those that are held for two years or longer). The maximum rate of tax on profit when sold on these will be cut to 21% from 25%. Losses on sales of Class A assets, if sold during 1963, may be offset against capital gains to the extent of the capital gains plus $1,000.

Each taxpayer will be able to exclude $100 of dividends from taxable income. Husbands and wives will be allowed to exclude $200 of dividends if stock is owned jointly or if the wife has enough stock in her name to cover the exclusion. If husband owns all the stock, only $100 can be excluded. The 4% dividend credit is cut to 2% in 1964 and eliminated entirely thereafter. ◄

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Medicine At Law

DECISIONS AND OPINIONS

Highlights of recent court actions pertaining to health and medicine from *The Citation* prepared by the Law Division of AMA.

Doctor's Conviction for Unlawful Possession of Narcotics Upheld—A doctor who arranged for a pharmacy to deliver a narcotic to his office, allegedly for the use of a patient, was convicted of unlawful possession of the drug. It was not necessary to show that he had personally received it, since he had sufficient control over it, for the purposes of the possession statute, when it arrived at his office. Since it was shown that the doctor acquired the narcotics for his own purposes, his physician's privilege to possess narcotics did not apply.

The doctor was convicted on 22 counts, each charging a narcotics offense. The evidence showed a uniform pattern, in that the doctor wrote narcotics prescriptions in the names of patients and had the prescriptions filled but never delivered them to the patients named in the prescriptions. There was also evidence that he had made illicit sales of narcotics to an acknowledged user.

On appeal, the doctor argued that the prescriptions were not unlawful, since they bore the names of actual persons and their true addresses, even though they were not the actual users of the drugs. The court pointed out that such methods involved as much falsifications as if fictitious names had been used.

The doctor also claimed that he had not personally received the narcotics, even though they were delivered by the pharmacy, at his instructions, to his office and were paid for in the office. The court ruled that in such circumstances the doctor was deemed to have control of the drugs.

People v. Meyer, 31 Cal. Rptr. 285 (Cal., May 27, 1963).

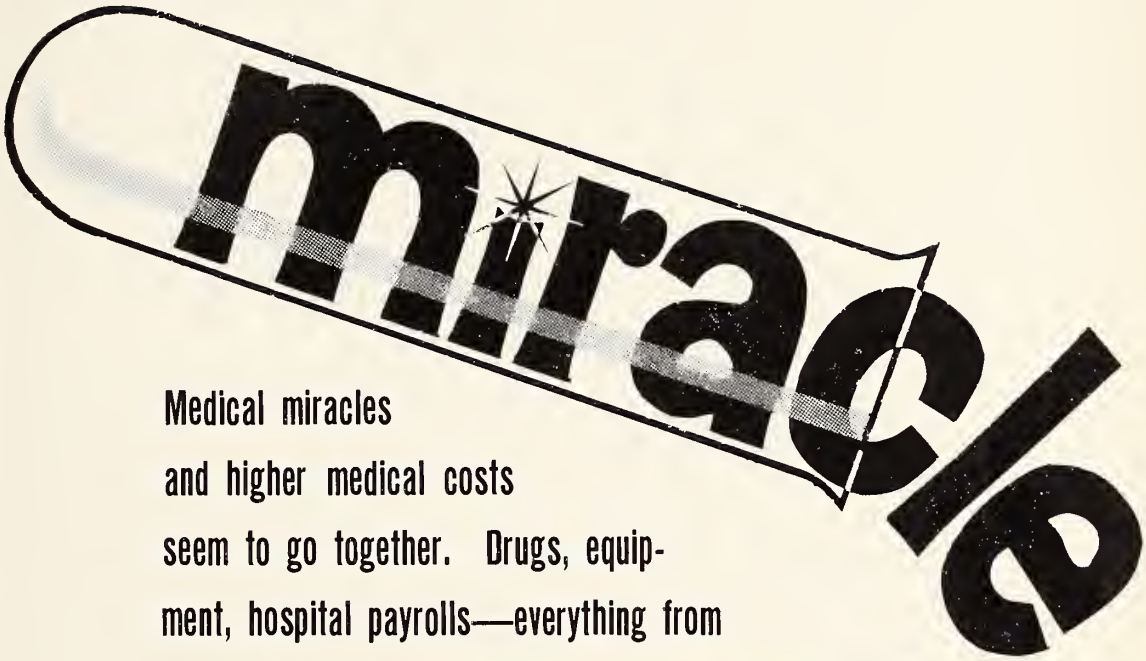
Physician Recovers Damages from Attorney for Slander Arising Out of Malpractice Suit—A judgment for $13,500 general damages and $5,000 punitive damages against an attorney for slandering a physician in connection with a suit in which the attorney represented parties suing the physician for malpractice was affirmed by an intermediate appellate court in California. Rejecting technical objections, the court held that the evidence was sufficient to support a finding that the attorney had slandered the physician. It also ruled that the damage award was not excessive.

The evidence tended to show that the attorney was responsible for a newspaper story which made certain untrue statements of fact and charges which went beyond the allegations of the complaint in the suit against the physician. The physician won the suit against him which arose out of the death of a child patient. He then, in turn, sued the attorney and the newspaper which published the story. His claim against the newspaper was settled.

Hanley v. Lund, 32 Cal. Rptr. 733 (Cal., July 25, 1963).

(It should be noted that this decision does not establish a principle that a physician who is unsuccessfully sued for injuries allegedly caused by him to his patient can always recover damages from the attorney representing the party who sued him. If the attorney in this case had not been responsible for statements which went beyond the allegations of his client's complaint,

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it is doubtful if he would have been held liable for damages.)

Published Medical Standard Admissible in Shock-Therapy Suit—Where a psychiatrist acknowledged the authenticity and applicability of published medical standards, the North Carolina Supreme Court held that the published standards should have been admitted in evidence. Where such evidence was excluded in a suit by a patient, a judgment for the psychiatrist was reversed.

The patient underwent five electric shock treatments. He complained of immediate severe pain in his lower back following the first treatment and the psychiatrist administered heat treatments and injections for the pain. An x-ray examination was not made by him, however. Two days after the patient was discharged by the psychiatrist, he went to another physician, who discovered a severe compression fracture of the ninth vertebra. The evidence showed that the psychiatrist was familiar with "Standards for Electroshock Therapy," prepared by the American Psychiatric Association. Among other things, these Standards provide, "(e) . . . If the patient should complain of pain or impairment of function, he should receive a physical examination, including x-ray, to ascertain whether he has suffered accidental damage."

The trial court refused to admit the evidence of the Standards and the defendant's familiarity with them. The Supreme Court held that this information should have gone to the jury to enable it to determine whether or not the defendant was guilty of negligence in failing to take x-rays to discover the cause of the plaintiff's low back pain.

Stone v. Proctor, 131 S. E. 2d 297 (N. C., June 14, 1963).

Husband has Right to Full Disclosure of Wife's Medical Records—In Louisiana, a husband has a right to obtain hospital records of his wife and to use them against her in a divorce proceeding. An appellate court in that state affirmed a decision denying damages to the wife against the hospital for disclosure of confidential information.

While the husband and wife were still married, although voluntarily living separate and apart, the husband obtained a copy of a hospital record relating to the wife's hospitalization. In a subsequent divorce suit, the hospital record was produced under a court order. The wife then sued the hospital and its insurance carrier for damages for thus disclosing a record which she contended was confidential information.

The appellate court held that (1) the husband, during the marriage, had a right to a full disclosure concerning his wife's physical condition and (2) whatever privilege a patient may have regarding communications with a doctor or hospital, once a patient institutes a suit, in the prosecution or defense of which such communication or records are necessary and relevant, no privilege exists, in which event such records are admissible in evidence or the doctor may be ordered to appear and testify under proper subpoena.

Pennison v. Provident Life and Accident Insurance Company, 154 So. 2d 617 (La., June 4, 1963; rehearing denied, July 1, 1963). ◄

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Blue Cross developed an in-patient diagnostic benefit which is provided when a member or dependent is a bed patient in a hospital for a diagnostic study. Blue Shield out-patient diagnostic benefits are available providing payment of up to $50.00, $75.00, or $100.00 per person per contract year for services in the physician's office or clinic.

It was the intent of the first Blue Shield and Blue Cross diagnostic programs to provide payment for x-rays and laboratory which assisted in the establishment of a diagnosis where specific symptoms of a disease or injury were present. Routine tests and screening examinations were not and are not a part of either Blue Cross or Blue Shield's diagnostic programs. Examinations in connection with pregnancy, care of the teeth, physical exams, premarital examinations, allergy survey tests, etc., are also excluded under these programs.

Blue Cross and Blue Shield introduced their diagnostic programs on an experimental basis in just a few accounts. Our experience proved that both in-patient and out-patient programs were workable, and now they are sold on a broad scale, and their sale is actually being pushed.

Both Blue Shield and Blue Cross have been successful in selling diagnostic benefits. At the end of 1962, 60% of our account members were protected by the $50.00, $75.00, or $100.00 Blue Shield endorsements for out-patient services. Some 42% of our account members had the Blue Cross in-patient endorsement, and we will continue to stress the sale of all these programs. Diagnostic benefits have always been limited to account members, and have not been sold to direct pay members.

As long as physicians and members restrict the use of these programs to x-rays and laboratory services for true symptomatic conditions, the programs will continue to work. The programs will not work, however, when used to cover routine physicals or any other services where there are no symptoms.

The reason our diagnostic programs will not work when used in instances where there are no symptoms is quite evident when you know the income we receive for this coverage. The Blue Cross in-patient endorsement is rated at 10 cents a month for a single membership, and at 30 cents a month for a family membership. The average fee charge for the Blue Shield out-patient diagnostic benefits is 30 cents a month for a single membership, and 70 cents a month for a family membership, with a maximum of $50.00 per person per contract year. A single member, therefore, pays us a total of $3.60 per year for this coverage. If he were to have a yearly chest x-ray, Blue Shield would be losing at least $6.40 per year on this member. This membership fee could not even begin to support a Papanicolaou smear for each female member without destroying the program. Our income from these programs is sufficient when the services are limited to symptomatic conditions, but the income is not sufficient when used for services that are needed—but fall outside the intended and written benefit pattern.

It is our feeling that physical check-ups and other services can be anticipated and budgeted for. Services of this type are in the long run less expensive when the patient pays them on an out-of-pocket basis rather than through a prepayment program. ◄

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George F. Wright, 41 Julie Drive, Gallup, N. Mex. —*Surgery*

Robert F. Greene, 1901 Beech St., Pittsburgh, Pa. —*Surgery*

Ali S. Emrani, 1585 Astor Ave., Bronx, N. Y.—*Urology*

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Kosciusko—WARSAW—population 7,200 with a three-mile radius population of 12,000. Seven physicians in town—one retiring and one in inactive practice. Accredited hospital. Rapidly growing and progressive community with new and excellent school facilities. Lake area that offers recreation facilities. County medical society voted to interest more general practitioners in starting practice in Warsaw. Contact R. D. Dormire, M.D., 600 East Winona Ave., Warsaw, for more details.

Madison — SUMMITVILLE — population 1,200. Opening for a general practitioner to associate with Wm. C. Van Ness, M.D., in a clinic. Dr. Van Ness only physician in the town. Contact Dr. Van Ness for details.

Sullivan—FARMERSBURG—population 1,100 with a potential population of 8,000 to 12,000 in the surrounding area. Eight small towns within eight miles. Hospital facilities at Sullivan, 10 miles away, and Terre Haute, 15 miles away, where there are two hospitals. Good schools and housing. One physician in the town. Contact Mr. Garland Forbes, R. R. 2, White Acres Food Center, Farmersburg. ◄



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ABSTRACTS

BOOK REVIEWS

PREVENTIVE MEDICINE IN WORLD WAR II: COMMUNICABLE DISEASES, MALARIA

Medical Department, United States Army, Colonel John Boyd Coates, Jr., M.C., U.S.A., Editor-in-Chief. U. S. Government Printing Office, 642 pages, 63 illustrations, 80 tables, 26 charts, and 32 maps. Price $6.25.

Originally the medical history of World War II was to have a volume devoted to all arthropoid-borne diseases. The wealth and importance of material related to one of these diseases, malaria, was large enough to justify a volume for malaria alone.

Disease in general has always been a more potent producer of disability and death in war than weapons. In World War II the most important disease was malaria. It was said at one time that, regardless of other factors, the side which first and most adequately controlled malaria in the Pacific would win the war. This statement proved to be true for the Pacific and for most of the other theaters also.

This volume tells one of the most dramatic stories of preventive medicine to come out of any war. Research was necessary to increase the basic knowledge available at the outset. Organization, training and the production and distribution of proper supplies were accomplished quickly.

As with any important military function, it was found that malaria control depended absolutely on proper function of command. When the responsibility for control was placed on unit commanders malaria rates fell to surprisingly low levels. As the war progressed some well trained units in active combat had malaria rates lower than the usual peace-time army rates for the same terrain.

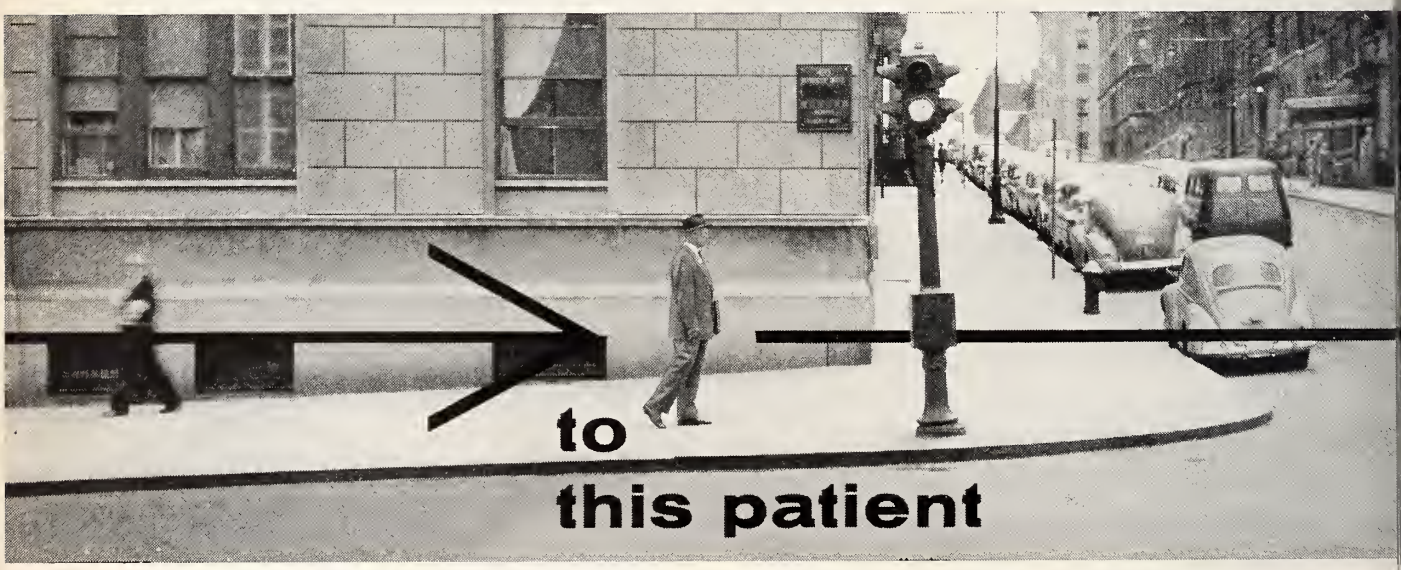
This is a most important reference work for anyone, military or civilian, who is concerned with control of malaria. It could be read with interest by anyone for the sheer glamour and glory of a program of preventive medicine which won the war.

FRANK B. RAMSEY, M.D.
Indianapolis

A HISTORY OF AMERICAN PATHOLOGY

Long, Esmond R., M.D., Ph.D. Chas. C Thomas, Springfield, Ill., 1962. 460 pages; approximately 50 photographs; extensive annotations. $12.50.

This book was a long time in writing; it presents in almost too much detail the growth and development of a scientific discipline to which the distinguished author himself has contributed not a little.



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Anyone wanting to look up a historical point can, quite often, come to this volume and find an answer.

The format is excellent, the printing splendid and the binding superb. I think, however, that there is a tendency to emphasize chronology and inter-scholastic exchanges of the past at the expense of—shall I say—more personal flesh and blood items. If Dr. Long ever gets around to another edition of this erudite compendium, I make bold to make this very slight suggestion.

Of course, it is a pleasurable addition to my library. I think many doctors will be buying this volume just for that reason.

ARNOLD LIEBERMAN, M.D.
New York, N. Y.

MOVING INTO MANHOOD

Bauer, W. W., M.D. Doubleday & Co., New York, 1963. $2.95.

For 30 years, Dr. Bauer served as Director of the Department of Health Education of the American Medical Association and was editor of *Today's Health*. He has made many valuable contributions (22 books) of popular and practical works on various aspects of health and good living. This reviewer places this latest book as one of his outstanding productions.

Although this is a small volume (102 pages), it covers an extensive area of problems of boys and young men, and in its scope also considers many aspects of girls' problems and reproduction. Although it is a small volume it admirably covers a big subject.

The book is divided into eight chapters and each subject is concisely and directly dealt with. Some of the topics covered are: physiologic and emotional changes in both girls and boys as they approach puberty, and a discussion of the anatomy and physiology of the male and female reproductive organs with simple diagrams.

One chapter is devoted to the proprieties of association of boys and girls as they grow up. Another is devoted to courtship, the selection of a mate and preparation for marriage. Also such information as where the boy may go for help with his problems—wisely he is advised to go to parents, pastors and other qualified advisors. The author also expresses some sound ideas on financial matters for boys and also discusses alcohol and tobacco. High moral values are stressed throughout the book.

Few authors are better prepared than Dr. Bauer to write such a book which fills an urgent need for young people. His ability to express facts clearly and understandingly is exceptional. The book is highly recommended not only as available reading



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for boys but as a reference for parents, teachers, ministers and others who deal with the problems of boys and young men.

DAVID A. BICKEL, M.D.
South Bend

Abstracts From Various Literature, Prepared by AMA

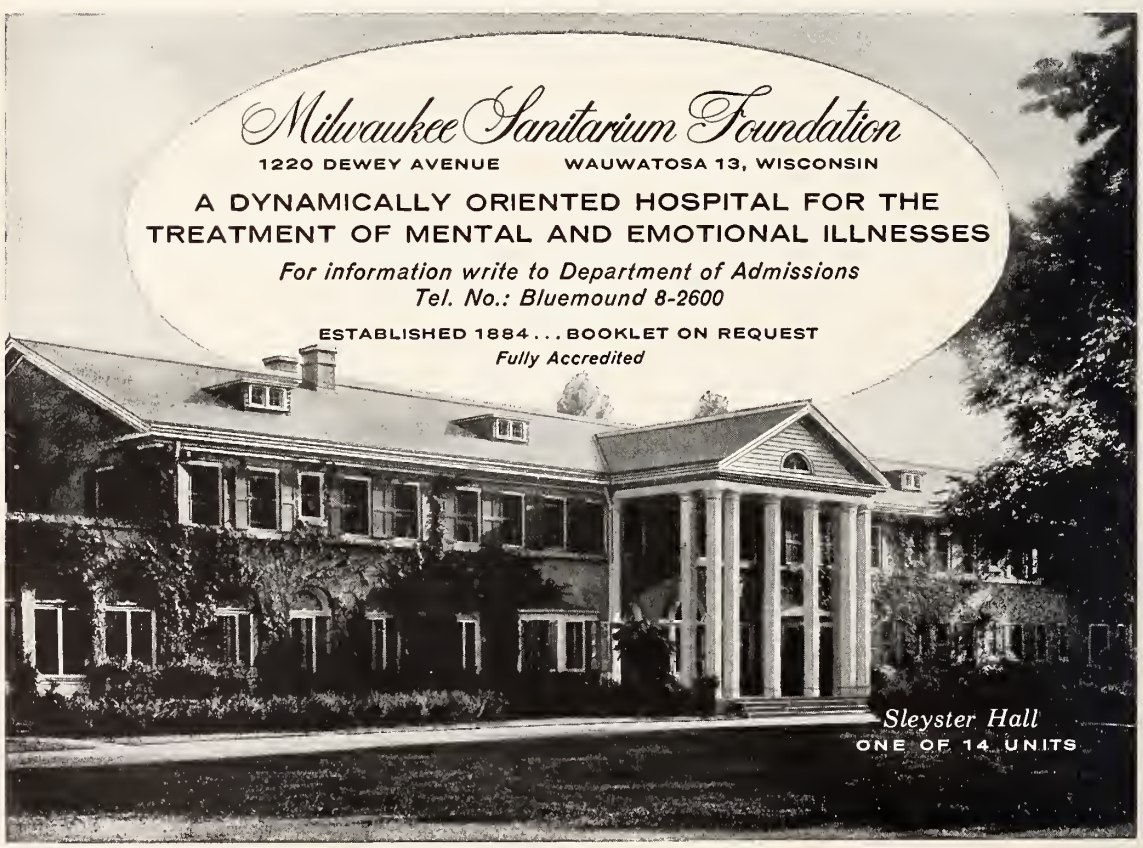
SPLENECTOMY IN HEMATOLOGIC DISEASE

Prediction of success following splenectomy is fraught with uncertainty in all but hereditary spherocytosis in which splenectomy is curative. Careful hematologic evaluation allows one to predict with considerable accuracy the results to be expected from splenectomy in other disease states. Use of blood components and steroids have made it possible to perform the operation more safely in poor risk patients and have in other instances supplanted the need for splenectomy. Fifty-three patients with hematologic disease, studied and treated by splenectomy, were divided arbitrarily into two groups. Group one was made up of those in whom a satisfactory result from splenectomy was to be anticipated, and group two of patients in whom the results of splenectomy were less predictable. Details of hematologic evaluation, preparation for operation, and results of treatment are described. With careful evaluation the number of failures should be few. The over-all mortality rate of splenectomy was 5.7%.

Schlicke, C. P., McIlvanie, S. K.: Results of Splenectomy in Hematologic Disease, *Arch. Surg.* 86:903 (June) 1963.

MAMMOGRAPHY: REPORT ON 2,000 STUDIES

The roentgenographic interpretation, without benefit of history and physical findings, of 2,000 consecutive soft tissue examinations of the breast is presented. A simple, safe, nontraumatic technic for mammography is outlined. It consists of one roentgenogram of the axilla and two of the breast, the latter in two planes at right angles. These have resulted in better study of a lesion and good delineation of the quadrants of the breast. Benign processes called malignant were the greatest source of error. In breasts containing infected cysts, abscesses, or fibrocystic disease associated with marked sclerosing adenosis or with ductal hyperplasia, or with both, exclusion of the presence of carcinoma by mammography was difficult. In no instance was the patient found to have a normal breast when a lesion was described on the x-ray report. Had mammography been used as a guide to definitive treatment, in the 737 lesions coming to biopsy, general anesthesia would have been avoided in 290 cases and only 29 patients with benign disease would have been prepared for rad-



ical mastectomy. Six carcinomas would have been overlooked, but 53 clinically unsuspected carcinomas would have come to earlier diagnosis and treatment. Axillary nodes were visible by roentgenography and aided in the diagnosis in malignant disease. In 167 cases, nonirradiated radical mastectomy specimens were available for study. In 118 of these, axillary nodes were noted on the mammograms and found to be carcinomatous on histopathological study. On eight occasions axillary nodes, noted on the mammograms, were free of carcinoma. In 25 cases, nodes containing carcinoma were not seen on the mammograms. Nearly all the latter were less than one cm. in diameter. Mammography can be encouraged as a sensible supplementary diagnostic procedure as part of the over-all evaluation of the patient.

Egan, R. L.: Mammography: Report on 2,000 Studies, *Surgery* 53:291 (March) 1963.

HORMONAL AND ISOTOPE MEASURES IN THYROID CANCER

The biological characteristics of well differentiated thyroid cancer may be exploited prophylactically and therapeutically. The establishment of the functional nature of thyroid cancer as well as its dependency upon thyrotropin are vital prerequisites to the success of radioiodine therapy and/or control by hormonal means. Therapy of metastatic cancer by thyrotropin suppression is particularly applicable to (1) younger patients in whom genetic and functional hazards of intensive radioiodine therapy are greater than in older patients, (2) neoplasms with considerable mass or extensive pulmonary involvement, and (3) patients with well differentiated tumors with insufficient uptake of radioiodine. The dependent status of thyroid cancer can usually be determined within three to six months. Radioiodine should be reserved for (1) patients with functioning tumors in whom thyrotropin suppression has failed to cause regression or in whom there is autonomy of function, (2) older patients with functioning tumors in whom the lesions are likely to be more aggressive and the radiation hazards potentially less severe, and (3) patients with rapidly progressive lesions in whom greater risks are warranted. The two types of treatment are not mutually exclusive and in many instances will be complementary.

Thomas, C. G., Jr., Jenkins, S. G., Jr.: Hormonal and Isotope Measures in Thyroid Cancer, *Ann. Surg.* 157:960 (June) 1963.

STAPHYLOCOCCUS ENTEROCOLITIS

Eighteen cases of staphylococcic enterocolitis were encountered on the surgical service of the Veterans Administration Research Hospital, January, 1959 to July, 1962. Gastrointestinal tract carcinomas were the most common preoperative diagnosis. Most patients were debilitated and had a history of severe weight loss. Laboratory studies

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showed no resistance of staphylococci to methicillin or sodium oxacillin. All patients were treated intensively with fluids, electrolytes, fecal enemas, and ACTH or cortisone plus an antibiotic. Twelve patients received erythromycin or chloramphenicol and only four survived. The other six were treated with methicillin or sodium oxacillin, and all showed an excellent clinical response and survived. It is concluded that these are the antibiotics of choice in treating staphylococcal enterocolitis.

Gardner, R. J., Heneger, G. C., Preston F. W.: Staphylococcus Enterocolitis, *Arch. Surg.* 87:58 (July) 1963.

MALIGNANCIES IN CHILDREN

Data is presented to show the occurrence of childhood malignancies among a total population of over 9,000,000 in New York State, of which about 2,769,000 are children under 15 years of age. Little change has occurred in either incidence or mortality rates from childhood malignancies over the last two decades. Leukemia is by far the most common malignancy occurring in youngsters, and it accounts for almost half of the fatalities. The early age from birth to five years appears to be the most dangerous with respect to leukemia. Physicians who see children regularly, for periodic examinations or during acute illness, are in the best position to detect early malignant disease. The sooner the diagnosis is made, the more chance there is for favorable therapy and improved survival.

Handy, V. H.: Malignancies in Children, *Amer. J. Dis. Child.* 106:54 (July) 1963.

STUDY OF ADULTS TREATED WITH ROENTGEN RAYS FOR THYROID DISEASE

A group of adult patients, treated by roentgen rays for diseases of the thyroid, was followed for 10 to 35 years to determine the possible carcinogenic effect of such radiation on the thyroid gland. This group was compared with a series of patients similarly treated during adolescence and with another group treated in childhood. A direct relationship between roentgen therapy to the neck region and the subsequent development of thyroid cancer appears to exist in those treated in childhood and adolescence. The data now available suggest that the younger the patient when treated, the greater the possibility of development of thyroid carcinoma. The data also indicate that the interval between radiation and the development of carcinoma is considerably less in children than in adolescents. Roentgen therapy does not appear to be a carcinogenic factor in adults.

DeLawter, D. S., Winship, T.: Follow-up Study of Adults Treated with Roentgen Rays for Thyroid Disease, *Cancer* 16:1028 (Aug.) 1963.

Continued

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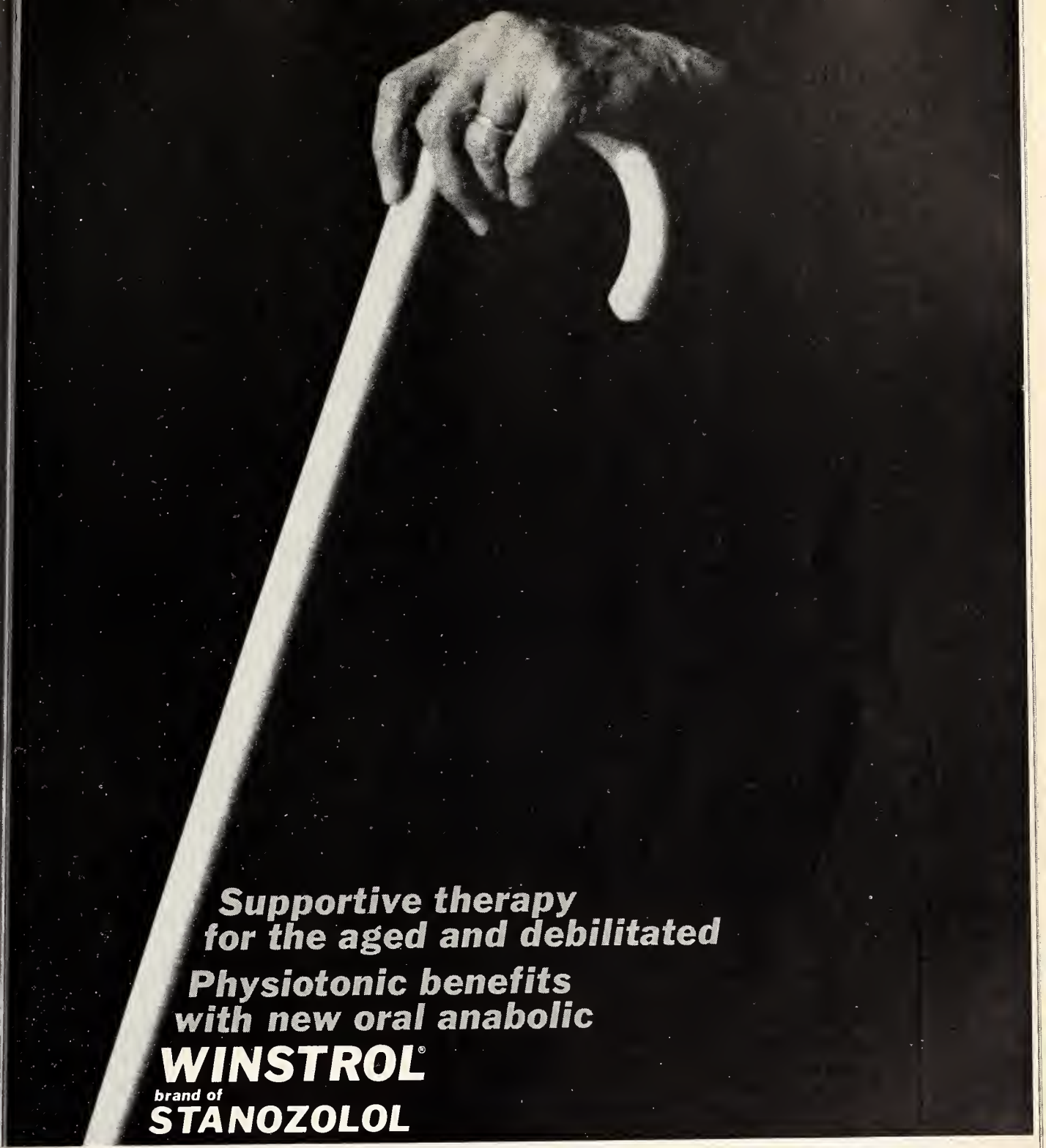
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ide Effects and Precautions: Prolonged administration can produce nild hirsutism, acne or voice change. In an occasional patient, edema as been observed and in young women the menstrual periods have een milder and shorter. These side effects are reversible, and pa-ents receiving prolonged treatment should be examined and ques-tioned periodically so that, should side effects appear, the dosage may be reduced or administration of the drug discontinued for a time. In patients with impaired cardiac and renal function, there is the possibility of sodium and water retention. Liver function tests may reveal an increase in bromsulphalein retention, particularly in elderly patients. In such cases, therapy should be discontinued. Although it has been used in patients with cancer of the prostate, its mild androgenic activity is considered by some investigators to be a contraindication.

Dosage: Usual adult dose, 1 tablet t.i.d. before or with meals; young women, 1 tablet b.i.d.; children (school age): up to 1 tablet t.i.d.; children (pre-school age): ½ tablet b.i.d. Available as scored tablets of 2 mg. in bottles of 100. For best results, administer with a high protein diet.

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ABSTRACTS, BOOKS

Continued

MYXEDEMA AND HEART-FAILURE

Twenty patients with myxedema were studied. Sixteen had an enlarged cardiac shadow and seven of these also had raised venous pressure and clinically appeared to be in heart-failure. The pulse pressure response to the Valsalva maneuver showed that 19 were not in cardiac failure and treatment of these resulted in complete recovery. In the other patient, thyroid caused rapid deterioration and death from ischemic cardiac failure. Evidence is presented that myxedema of itself does not cause heart-failure; if heart-failure is present, it is the result of some other disease. In such a situation, the reduced metabolic rate is beneficial, and if it is increased by thyroid, the heart-failure will become worse.

McBrien, D. J., Hindle, W.: Myxedema and Heart-Failure, *Lancet* (London) 1:1066 (May 18) 1963.

CHOLECYSTOSTOMY: ITS PLACE IN TREATMENT OF ACUTE CHOLECYSTITIS

Conservative management of acute cholecystitis has frequently been too prolonged, particularly in the aged. Early cholecystostomy followed by interval cholecystectomy has improved the treatment of these patients at a veterans' hospital. The following advantages have been noted: (1) Advanced disease in the elderly toxic patient has been successfully treated by a short, minor surgical procedure. (2) Cholangiography by way of the cholecystostomy has revealed dilatation or stones, or both, in the common bile duct. (3) Interval cholecystectomy has been facilitated by the absence of general toxicity, a subsiding inflammatory process, and preoperative knowledge of the status of the common bile duct.

Collins, D. L., Thomson, F. B.: Cholecystostomy: Its Place in Treatment of Acute Cholecystitis, *Canad. Med. Ass. J.* 88:1267 (June 29) 1963.

EVALUATION OF SIX HYPNOTIC DRUGS

Six hypnotic drugs and a placebo were coded and given at random, one dose at 8 p.m. to 20 patients in a Toronto hospital. A special evaluation scale was used, studying average duration, time of onset, quality of sleep, and side effects. Secobarbital sodium (Seconal) and methyprylon (Noludar) were statistically significantly better than the placebo. The other drugs, glutethimide (Doriden) and three quinazolinone derivatives, were not statistically different from the placebo. The placebo effect itself was studied, and statistical treatment of the data is explained in detail.

le Riche, W. H., van Belle, G.: Clinical and Statistical Evaluation of Six Hypnotic Drugs, *Canad. Med. Ass. J.* 88:837 (April 20) 1963.

HALOTHANE HEPATITIS—AN AMERICAN DISEASE?

Hepatitis associated with halothane anesthesia has been reported with considerable frequency in recent months. An additional case is presented which showed (1) multiple anesthesias with halothane, (2) delayed symptoms, (3) pyrexia and (4) hepatocellular necrosis with round cell infiltration of portal tracts on biopsy. This case, and the overwhelming majority of reported cases, were seen in the United States. Although the original work with halothane was carried out in Britain, and the agent was manufactured there for distribution until recent months, no cases have, thus far, been reported from the United Kingdom. An explanation as to why no cases have occurred in England may be helpful in preventing the loss of this valuable anesthetic because of unfavorable public opinion.

Heidenberg, W. J., Iorio, I. S., Cebula, J.: Halothane Hepatitis—An American Disease? *Lancet* (London) 1:1185 (June 1) 1963. ◄

W. B. SAUNDERS COMPANY features the following new books in their full page advertisement appearing elsewhere in this issue:

ATOMIC ENERGY ENCYCLOPEDIA OF THE LIFE SCIENCES—Edited by C. W. Shilling

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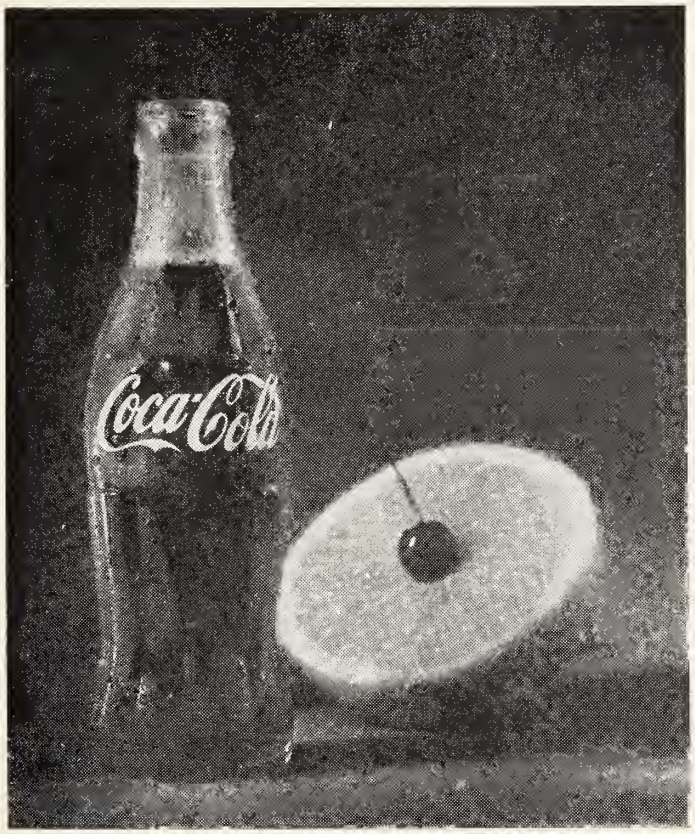
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MONTHLY REPORT—October, 1963

Disease	Oct. 1963	Sept. 1963	Aug. 1963	Oct. 1962	Oct. 1961
Animal Bites	692	733	1019	603	497
Chickenpox	107	37	40	128	56
Conjunctivitis	23	44	48	41	51
Diphtheria	1	1	0	1	1
Dysentery, Unspecified	81	197	270	37	71
Gonorrhea	308	304	323	Not Available	
Impetigo	172	146	135	153	258
Infectious Hepatitis	43	38	47	66	100
Infectious Mononucleosis	16	10	14	6	25
Influenza	382	253	105	957	640
Measles (Rubeola-Rubella)	123	88	111	77	112
Meningitis, Meningococcal	2	6	0	1	1
Meningitis, Other	8	8	7	13	9
Mumps	139	106	86	55	46
Pertussis	21	43	62	36	7
Pneumonia	87	99	64	75	138
Poliomyelitis	0	0	0	5	6
Streptococcal Infections	291	199	219	278	298
Syphilis					
Primary and Secondary	7	2	1	Not Available	
All Other Syphilis	168	86	100	Not Available	
Tinea Capitis	9	4	3	14	57
Tuberculosis (Active)	111	79	142	121	115



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The Journal Staff Attends SMJAB Conference in Chicago

Dr. Frank Ramsey, editor of *The Journal*, Mr. James A. Waggener and *The Journal* staff traveled to Chicago on October 21, for the biennial conference of the State Medical Journal Advertising Bureau. Dr. Ramsey, chairman of the board of SMJAB, was the keynote speaker.



The conference which met to discuss the problems confronting state medical journals in a market already full of medical publications also offered many interesting ideas for increasing reader interest.

The meeting, which lasted a day and a half, was well attended with representatives coming from as far away as Hawaii. Dr. Austin Smith of the Pharmaceutical Manufacturers Association and Dr. Raymond M. Rice of Eli Lilly and Company were among the featured speakers.

We feel that we all benefited from this opportunity to meet and exchange ideas.

Two Indiana Men Named SK&F Service Representatives

John R. Coble has been assigned to the South Bend territory as a professional service representative for the pharmaceutical firm of Smith Kline & French Laboratories.

Coble, a former account executive with the Michiana Telecasting Corp., is a graduate of DePauw University and attended Indiana University.

G. William Chapman, of Fort Wayne, has been assigned to the Muncie territory.

Chapman formerly was employed by the Fort Wayne Newspapers, Inc. as a circulation district manager. He attended Indiana University.

Booklet List Published By Fire Protection Association

The National Fire Protection Association has recently issued its Fire Protection Publications list for 1964. Free copies may be obtained by writing the Association at 60 Batterymarch St., Boston, Mass., 02110.

Of interest to physicians are booklets dealing with fire prevention and fire experience in hospitals, nursing homes, homes for the aged and private residences. These and many other works on fire control are listed, described and priced.

Dr. Bibler is Society Speaker

Lester D. Bibler, M.D., spoke before the Charles River District Medical Society in Newton, Massachusetts in October on "Relative Value Studies."

Applications for Psychiatrist Director Now Being Accepted

Applications are now being accepted by the Adult Psychiatric Center of Northeast Indiana in Fort Wayne, Indiana, for the position of Chief Psychiatrist Director.

Board certified or board eligible person with an Indiana medical license is desired.

Continued



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Dr. Gillespie Elected

Dr. Charles F. Gillespie of Indianapolis was elected the new chairman of District V of the American College of Obstetricians and Gynecologists, at the recent annual district meeting in Detroit.

ISMA Members Participate In Anesthesiologists Meeting

Several ISMA members participated in an official capacity in the recent annual meeting of the American Society of Anesthesiologists in Chicago.

Dr. Paul Littlefield of Indianapolis served as a director and Drs. R. H. Stein of Vincennes and M. E. Pickett of Fort Wayne were delegates. Drs. E. D. Hamilton, Fort Wayne, R. H. Russell, Evansville, and W. W. Cooper, Evansville were alternate delegates.

Medifilm Report V on AMA Annual Meeting Now Available to Doctors

Medifilm Report V, featuring highlights of the American Medical Association's annual meeting in Atlantic City, is now available to medical and allied groups. It is presented by the Schering Corporation in cooperation with the American Medical Association's Council on Scientific Assembly.

Some of the important scientific developments presented at this meeting have been preserved on this 30 minute black and white, sound film featuring scientific exhibits, lectures and panel discussions.

This film was designed for showing at state and county medical societies and for hospital staff meetings, and offers an excellent opportunity for physicians to learn more about the variety of scientific presentations at the meeting.

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You can reserve this film by writing the Film Library of the AMA. The only expense will be postage on the returned film.

Draft Call Information Given For Indiana Physicians

After a special call for physicians is received by the Director of Selective Service from the Secretary of Defense, the call is allocated by National Headquarters of Selective Service to the various states.

The distribution of the call to a state is determined by its percentage of the total number of physicians who have been classified as available for induction in the necessary number of age groups involved to meet the call.

That is to say, if ten percent of physicians in the age groups estimated to be needed to meet the call are to be found in your state then ten percent of the call will be made against your state, i.e., if there are 1,000 in I-A (examined and acceptable) in the liable age group for that call in your state, they will be asked to supply 100 to meet the call.

Roy J. Heffernan, M.D., Chairman
National Advisory Committee
To the Selective Service System

Indiana Physicians Named Fellows Of American College of Surgeons

Seventeen Indiana physicians have been named as Fellows of the American College of Surgeons.

The new Fellows are Drs. Harry D. Brickley, Jr., Robert L. Campbell, Bennie L. Davis, Robert F. Heimburger and Robert D. King, Indianapolis; Mark E. Smith, New Castle; Charles G. Griffith, Valparaiso; Richard C. McPherson, Lafayette; Charles K. Liddell, Michigan City; James W. Kress, Muncie; Donald E. Meier, Bluffton; George A. Carberry and Charles J. Yast, Gary and William J. Fitzpatrick, James S. McLean, Alfred M. Mintz and Fred R. Portney, Hammond.

Continued

SCIENTIFIC EXHIBIT APPLICATION FORM

Committee on Scientific Exhibits
Indiana State Medical Association
3935 N. Meridian Street
Indianapolis 8, Indiana

Please send me an application form for a Scientific Exhibit at the ISMA Annual Convention, October 13-15, 1964, Murat Temple, Indianapolis, Indiana.

I propose to exhibit_____

Name_____

Address_____

City_____

State_____



Protects your angina patient better than vasodilators alone

'Miltrate' contains both pentaerythritol tetranitrate, which dilates the patient's coronary arteries, and meprobamate, which relieves his anxiety about his condition. Thus 'Miltrate' protects your angina patient better than vasodilators alone.

Pentaerythritol tetranitrate may infrequently cause nausea and mild headache, usually transient. Slight drowsiness may occur with meprobamate and, rarely, allergic reactions. Meprobamate may increase effects of excessive alcohol. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction. Like all nitrate-containing drugs, 'Miltrate' should be given with caution in glaucoma.

Dosage: 1 or 2 tablets *before meals* and at bedtime. Individualization required.
Supplied: Bottles of 50 tablets.

CML-9646

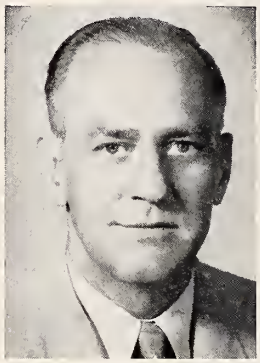
Miltrate®
meprobamate 200 mg.+
pentaerythritol tetranitrate 10 mg.

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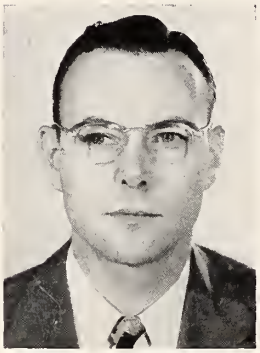
NEWS NOTES

Continued

Drs. Mercer, Johnson and Wilkins Elected to Fill ISMA Journal Posts



SAMUEL R. MERCER, M.D.



GEORGE M. JOHNSON, M.D.



IRVIN W. WILKENS, M.D.

Dr. Samuel R. Mercer, Fort Wayne, has been elected associate editor of *The Journal* for 1964. He replaces Dr. Stephen L. Johnson, Evansville, who retired.

Drs. George M. Johnson, Richmond, and Irvin W. Wilkens, Indianapolis, were elected to succeed themselves for another three-year term on *The Journal* Editorial Board. ◄

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ADDRESS _____

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Each tablet contains:

Codeine Phosphate*	15 mg.
'Sudafed'® brand Pseudoephedrine Hydrochloride	20 mg.
'Perazil'® brand Chlorcyclizine Hydrochloride	15 mg.
Phenacetin	150 mg.
Aspirin	200 mg.
Caffeine	30 mg.

*Warning—may be habit forming

'Emprazil-C' Tablets are available on prescription only.

Dosage: Adults and children over 12 years—1 or 2 tablets—3 times daily as required. Children 6 to 12 years—1 tablet—3 times daily as required. **Caution:** While pseudoephedrine is virtually without pressor effect in normotensive patients, it should be used with caution in hypertension. Also, while chlorcyclizine has a low incidence of antihistaminic drowsiness, the usual precautions should be observed. **Supplied:** Bottles of 100 tablets.

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Complete literature available on request from Professional Services Dept. PML.



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Annual Meeting Dates of Professional Medical and Allied Organizations

INDIANA STATE SOCIETY OF ANESTHESIOLOGISTS

Date May, 1964
Place Indianapolis

INDIANA ACADEMY OF GENERAL PRACTICE

Date March 11-12, 1964
Place Murat Temple, Indianapolis

INDIANA NEUROPSYCHIATRIC ASSOCIATION

Date Second Wednesday of every month, October through May
Place The Athenaeum, Indianapolis

INDIANA OBSTETRICAL AND GYNECOLOGICAL SOCIETY

Annual Meeting
Date January 15, 1964
Place Marott Hotel

INDIANA ACADEMY OF OPHTHALMOLOGY AND OTOLARYNGOLOGY

Date May 6-7, 1964
Place Marott Hotel, Indianapolis

INDIANA ASSOCIATION OF PATHOLOGISTS

Annual Seminar
Date May 17, 1964
Place Veterans Administration Hospital

INDIANA PHARMACEUTICAL ASSOCIATION

Mid-Year Meeting
Date January, 1964
Place Indianapolis



a Private Psychiatric Center at Jacksonville, Illinois, *since 1901*

Complete psychiatric treatment in an environment for cure. A 60 bed hospital with the most modern diagnostic and therapeutic equipment for the treatment of nervous and mental disorders.

LICENSED: Illinois Department of Mental Health

MEMBER: Illinois Medical Service (Blue Cross-Blue Shield)

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Practically standard treatment, now, for bleeding ulcer. Why is Maalox included? Antacid therapy *must* continue long after the wound has healed, and patients started on Maalox tend to stay on Maalox. It tastes good; it's effective and will not cause constipation—three important reasons for Maalox over the long haul. Some physicians, we are told, order Maalox routinely for hospital patients on drugs which could irritate. They feel it reduces the likelihood of gastric discomfort. Supplied: Suspension; Tablets No. 1; Tablets No. 2. (Each Maalox No. 1 Tablet is equivalent to 1 teaspoonful and each Maalox No. 2 Tablet is equivalent to 2 teaspoonfuls of Suspension.)



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LISTEN AND LEARN

TAPES OF THE MONTH

NON-SCIENTIFIC

NS-363 **"COMPETITION FOR SURVIVAL"**—Walter Petravage, Manager, Public Affairs Department, United States Chamber of Commerce. Recorded: 114th Annual Meeting of ISMA. Date: Oct 16, 1963. Time: 40 minutes.

NS-367 **"IT CAN HAPPEN HERE"**—Dr. Nicholas Nyaradi. Director of the School of International Studies, Bradley University; formerly Minister of Finance, Republic of Hungary. Recorded: 114th Annual Meeting of ISMA. Date: Oct 16, 1963. Time: 40 minutes.

NS-368 **"OPERATION CONFUSION"**—Dr. Nicholas Nyaradi, Director of the School of International Studies, Bradley University; formerly Minister of Finance, Republic of Hungary. Recorded: 114th Annual Meeting of ISMA. Date: Oct. 16, 1963. Time: 45 minutes.

NS-369 **INDIANA HEALTH FACILITIES COUNCIL**—A. C. Offutt, M.D., State Health Commissioner, Indiana State Board of Health. Recorded: Indiana Joint Council to Improve Health Care of the Aged Meeting. Date: Nov. 13, 1963. Time: 25 minutes.

NS-370 **HOSPITAL AND NURSING HOME WORKING AGREEMENTS**—Mr. D. W. Stickney, Associate Director, Illinois Hospital Association. Recorded: Indiana Joint Council to Improve Health Care of the Aged Meeting. Date: Nov. 13, 1963. Time: 30 minutes.

NS-371 **DEVELOPING WORKING RELATIONSHIPS BETWEEN NURSING HOMES AND HOSPITALS**—Mrs. F. L. Baltz, R.N., Vice-president, Americana Nursing Homes, Inc., Monticello, Ill. Recorded: Indiana Joint Council to Improve Health Care of the Aged Meeting. Date: Nov. 13, 1963. Time: 20 minutes.

NS-372 **THE HEALTH OF THE ELDERLY**—F. C. Swartz, M.D., Chairman of the AMA Committee on Aging. Recorded: Indiana Joint Council to Improve Health Care of the Aged Meeting. Date: Nov. 13, 1963. Time: 25 minutes.

NS-373 **UTILIZATION OF RESOURCES**—C. J. Cover, LL.B., Trustee of Parkview Hospital. Ft. Wayne. Recorded: Indiana Joint Council to Improve the Health Care of the Aged Meeting. Date: Nov. 13, 1963. Time: 20 minutes. ◄



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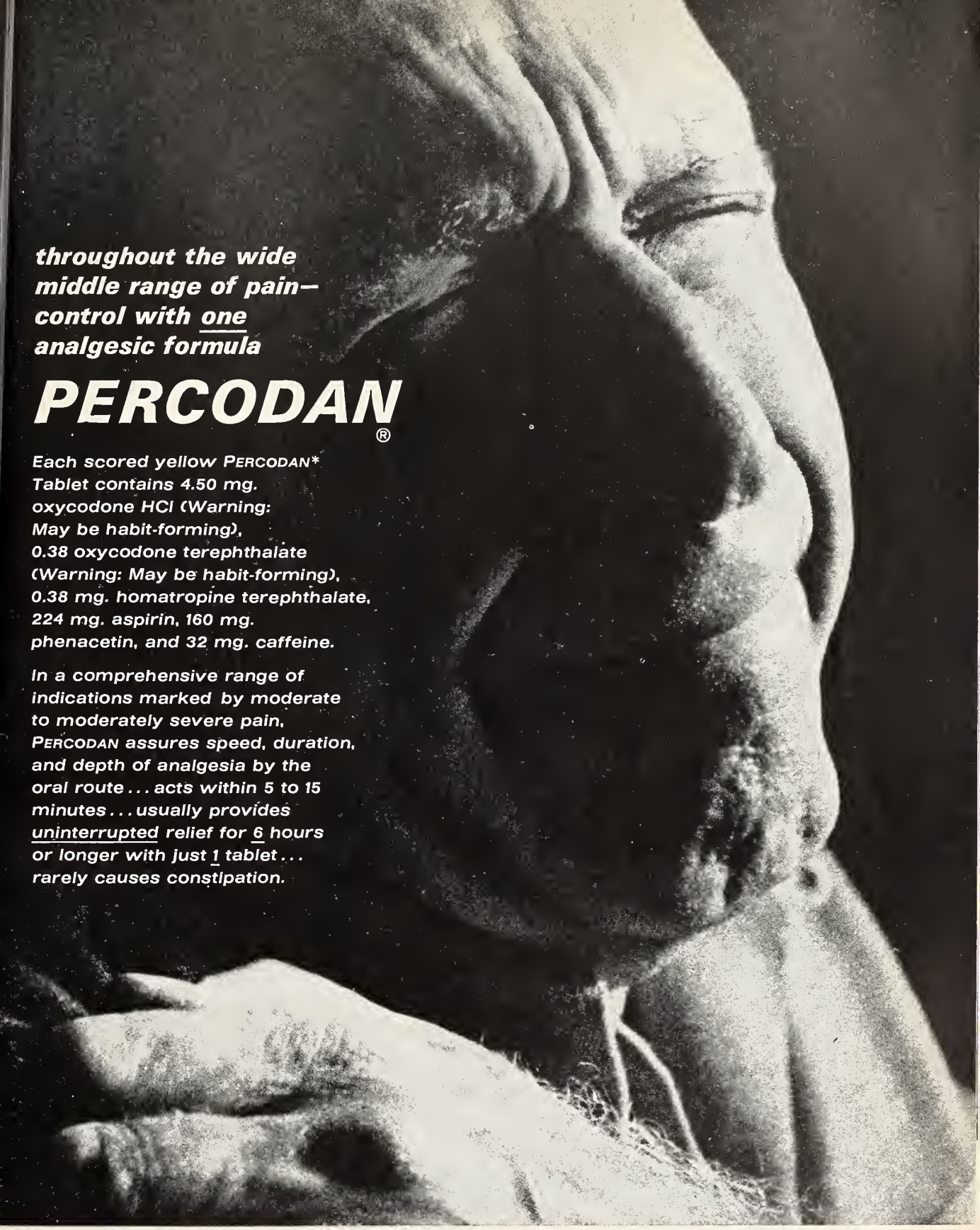
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throughout the wide middle range of pain— control with one analgesic formula

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Each scored yellow PERCODAN Tablet contains 4.50 mg. oxycodone HCl (Warning: May be habit-forming), 0.38 oxycodone terephthalate (Warning: May be habit-forming), 0.38 mg. homatropine terephthalate, 224 mg. aspirin, 160 mg. phenacetin, and 32 mg. caffeine.*

In a comprehensive range of indications marked by moderate to moderately severe pain, PERCODAN assures speed, duration, and depth of analgesia by the oral route... acts within 5 to 15 minutes... usually provides uninterrupted relief for 6 hours or longer with just 1 tablet... rarely causes constipation.

Average Adult Dose—1 tablet every 6 hours. **Precautions, Side Effects and Contraindications**—The habit-forming potentialities of Percodan are somewhat less than those of morphine and somewhat greater than those of codeine. The usual precautions should be observed as with other opiate analgesics. Although generally well tolerated, Percodan may cause nausea, emesis, or constipation in some patients. Percodan should be used with caution in patients with known idiosyncrasies to aspirin or phenacetin, and in those with blood dyscrasias. **Also available:** Percodan®-Demi, containing the complete Percodan formula but with only half the amount of salts of oxycodone and homatropine. Both products are on oral Rx in all states where laws permit. Narcotic order required. **Literature on request.** **ENDO LABORATORIES Richmond Hill 18, New York**

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National Symposium Scheduled For February in Pennsylvania

"The Cellular Basis for the Action of Cardiac Drugs" will be the topic of a two day seminar to be sponsored by the Heart Association of Southeastern Pennsylvania. The sessions will be held February 27 and 28, 1964 at the Sheraton Hotel, Philadelphia, Pennsylvania.

Additional information and reservations may be obtained by contacting the Heart Association of Southeastern Pennsylvania, 318 S. 19th St., Philadelphia 3, Pa. Registration fee is $10.00.

ISMA Members Invited to Attend Postgraduate Program in Texas

The International Medical Assembly of Southwest Texas invites members of ISMA to attend a postgraduate program in San Antonio on January 30 and February 1, 1964.

The meeting will be in the Granada Hotel. Further information may be obtained by writing Dr. William Center, 202 W. French Place, San Antonio, Texas, 78212.

Cleveland Clinic Foundation Announces Postgraduate Course

The Cleveland Clinic Educational Foundation has announced a postgraduate course in surgery for January 8 and 9. The topic will be "Colorectal Surgery in Children and Adults."

Further information may be obtained by writing the education secretary, 2020 East 93rd Street, Cleveland.

10th Annual General Practice Review Scheduled for January

The 10th annual General Practice Review has been set for January 12-18 at the Humphreys Postgraduate Center, University of Colorado School of Medicine.

Included in the full course will be seminars on obesity, medicine, pediatrics, surgery, fluid and electrolyte balance, obstetrics and gynecology and dermatology. Information may be obtained from the Office of Postgraduate Medical Education, University of Colorado Medical Center, 4200 East Ninth Avenue, Denver. ◄

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For further information write or call:

Dr. Donald E. Hale, Head of Dept. of Anesthesiology
or
Dr. Walter J. Zeiter, Director of Education
Cleveland Clinic Educational Foundation
2020 East 93rd Street
Cleveland 6, Ohio

Telephone: Area Code 216, CE 1-6800

Christmas Cheer

Just for a few hours on Christmas Eve and Christmas Day the stupid, harsh mechanism of the world runs down and we permit ourselves to live according to untrammelled common sense, the unconquerable efficiency of good will. We grant ourselves the complete and selfish pleasure of loving others better than ourselves. How odd it seems, how unnaturally happy we are!—From "Old Thoughts for Christmas," by Christopher Morley.

County, District News

First District

Dr. Guy Hoover, Boonville, has been elected president of the First District. Assisting him is Dr. Frank Oliphant, Mt. Vernon, vice-president and Dr. Eugene Austin, Evansville, secretary.

Tenth District

New officers of the Tenth District are Drs. Michael Shellhouse, Gary, president and E. J. Dierolf, Gary, secretary. Dr. Lee Trachtenberg, Hammond, was elected alternate delegate at the Oct. 9 meeting at Whiting.

Cass

Resolutions to be presented at the annual convention were discussed at the Oct. 7 meeting of the Cass County Medical Society. There were 21 members present.

Dubois

Thirty-two members of the Dubois County Medical Society met Oct. 10 in Jasper to view the AMPAC film. Field Secretary Robert Amick reported on the upcoming convention and discussed the mental health meeting set for Nov. 7.

Elkhart

The Elkhart County Medical Society viewed the American Academy of General Practice Road Show at their Nov. 7 meeting. There was a heart symposium, dinner and evening meeting.

Fayette-Franklin

Dr. Boynton Booth, Indianapolis dermatologist, spoke on "Diseases of Skin and their Treatment" before the Nov. 12 meeting of the Fayette-Franklin Medical Society.

Lake

The Lake County Medical Society met Nov. 6 to hear Rev. Robert Taylor, director of St. Leonard's House in Chicago, speak. His topic was "Narcotics—A Medical or Penal Problem?" There were 85 members present. Dr. Theodore J. Smith, Whiting, was elected president and Dr. R. J. Bills, Gary, secretary.

Montgomery

Dr. Marion Eaton spoke on "A New Urine Test in Diagnosis of Cancer of the Urinary Tract" before 21 members of the Montgomery County Medical Society at their Oct. 17 meeting.

Perry

Eight members of the Perry County Medical Society met Nov. 5 at Perry County Memorial Hospital. Dr. J. M. James played a recording of the ISMA convention address by Dr. Nicholas Nyaradi.

Shelby

The Shelby County Medical Society met Oct. 2 to hear Dr. Lloyd Holliday speak on "Athletic Injuries." There were 26 members present plus 40 coaches, principals and superintendents from the county.

Steuben

There were 11 members of the Steuben County Medical Society present at the Oct. 7 meeting of the organization. ◄



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"THE PROBLEM DRINKER"

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- the most modern, coordinated, comprehensive, rehabilitative regimen
- in addition to medical, nutritional and physiotherapeutic treatment, we also offer psychiatric diagnosis and psychotherapy
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The one tranquilizer that

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it's versatile: The years have proved that 'Miltown' (meprobamate) is the one tranquilizer that is helpful in almost every aspect of daily practice. Virtually any of your patients, regardless of age, can be given the drug with confidence, either as a primary treatment or as an adjunct to other therapy.

Outstanding record of safety: Over eight years of clinical use among millions of patients throughout the world — plus more than 1500 published reports covering the use of the drug in almost every field of medicine — support your prescriptions for 'Miltown' (meprobamate). This is why it *"belongs in every practice."*

dependable: 'Miltown' (meprobamate) is an established drug. There are no surprises in store for you or your patient. You can depend on it to help your patients through periods of emotional distress — and to help maintain their emotional stability.

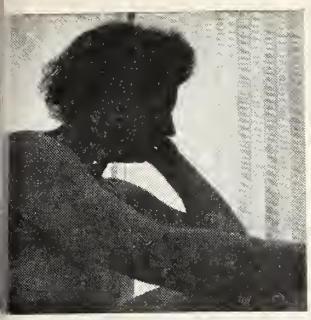
easy to use: Because 'Miltown' (meprobamate) is compatible with almost any other kind of drug therapy, you'll find it fits in easily with any program of treatment you are now using. It will not, therefore, complicate treatment of patients seen in clinical practice.

BRIEF SUMMARY: *Indications:* Anxiety and tension states, and all conditions in which anxiety and tension are symptoms. *Side Effects:* Slight drowsiness may occur and, rarely, allergic or idiosyncratic reactions, generally developing after 1-4 doses of the drug. *Contraindications:* Previous allergic or idiosyncratic reactions to meprobamate contraindicate subsequent use. *Precautions:* Should administration of meprobamate cause drowsiness or visual disturbances, the dose should be reduced. Operation of motor vehicles or machinery or other activity requiring alertness should be avoided if these symptoms are present. Effects of excessive alcohol may possibly be increased by meprobamate. Prescribe cautiously and in small quantities, to patients with suicidal tendencies. Massive overdosage may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after prolonged use at high dosage. *Complete product information available to physicians on request.*

USUAL ADULT DOSAGE: 1 or 2 400 mg. tablets t.i.d.

SUPPLIED: 400 mg. scored tablets, 200 mg. coated tablets.

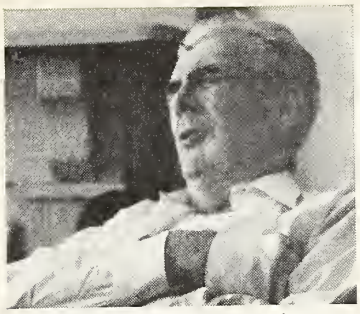
CM-9694



The insomniac



The tense, nervous patient



The heart-disease patient



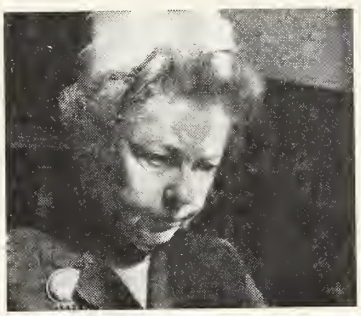
The surgical patient



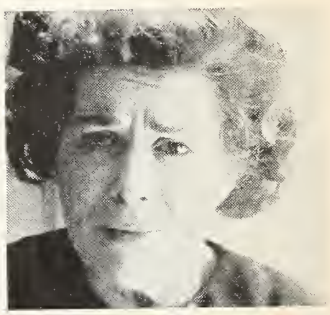
The girl with dermatosis



Tension headache



The woman in menopause



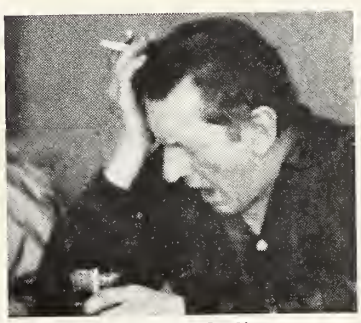
Anxious depression



Premenstrual tension



The agitated senile patient



The alcoholic



The problem child

the original brand of meprobamate

Miltown®



The G.I. patient

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Deaths

John C. Elliott, M.D.

Dr. John C. Elliott, retired physician-surgeon, died Oct. 21 in Emerson A. North Hospital at Cincinnati. He was 83.

Dr. Elliott had practiced more than 50 years in Dearborn County. He retired in 1959. A 1906 graduate of the University of Louisville Medical School, Dr. Elliott was Dearborn County health officer for 25 years. He was also past president of the Dearborn County Medical Society, an ISMA councilor and a member of the 50-Year Club.

Howard Lee Norris, M.D.

Dr. Howard Lee Norris, 71, retired ear, nose and throat specialist, died Oct. 22 in his home at Mooresville.

Until his retirement a year ago, Dr. Norris had offices in the Hume Mansur Building and was on the staffs of St. Vincent's and Methodist Hospitals. A graduate of Northwestern University Medical School, Dr. Norris practiced medicine in Indianapolis about 40 years. He was a former member of the Marion County Medical Society.

John R. Pearson, M.D.

Dr. John R. Pearson, 87, former resident of Bedford, died Oct. 1 in Miami, Fla.

A 1904 graduate of the Medical College of Indiana, Dr. Pearson had retired to Florida some years ago.

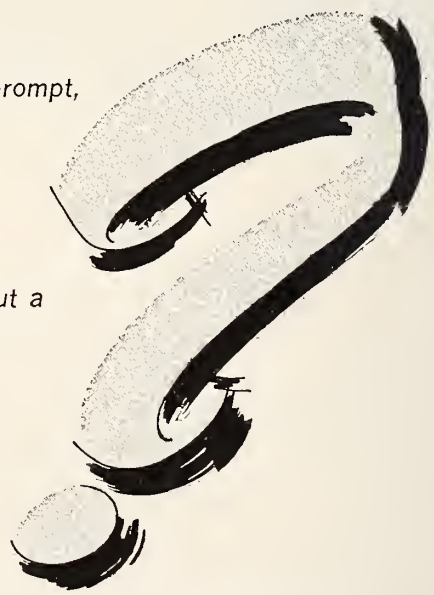
Sylvan H. Perlov, M.D.

Dr. Sylvan H. Perlov, Indianapolis pediatrician, died Oct. 22 at his home. He was 36.

Dr. Perlov, born at Baltimore, had been an Indianapolis resident for 18 years. He was a member of the staffs of St. Vincent's, Methodist, General and Community Hospitals. An honor graduate from the Indiana University School of Medicine in 1950, Dr. Perlov was a member of the Marion County Medical Society. ◄

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1963—The Convention Story



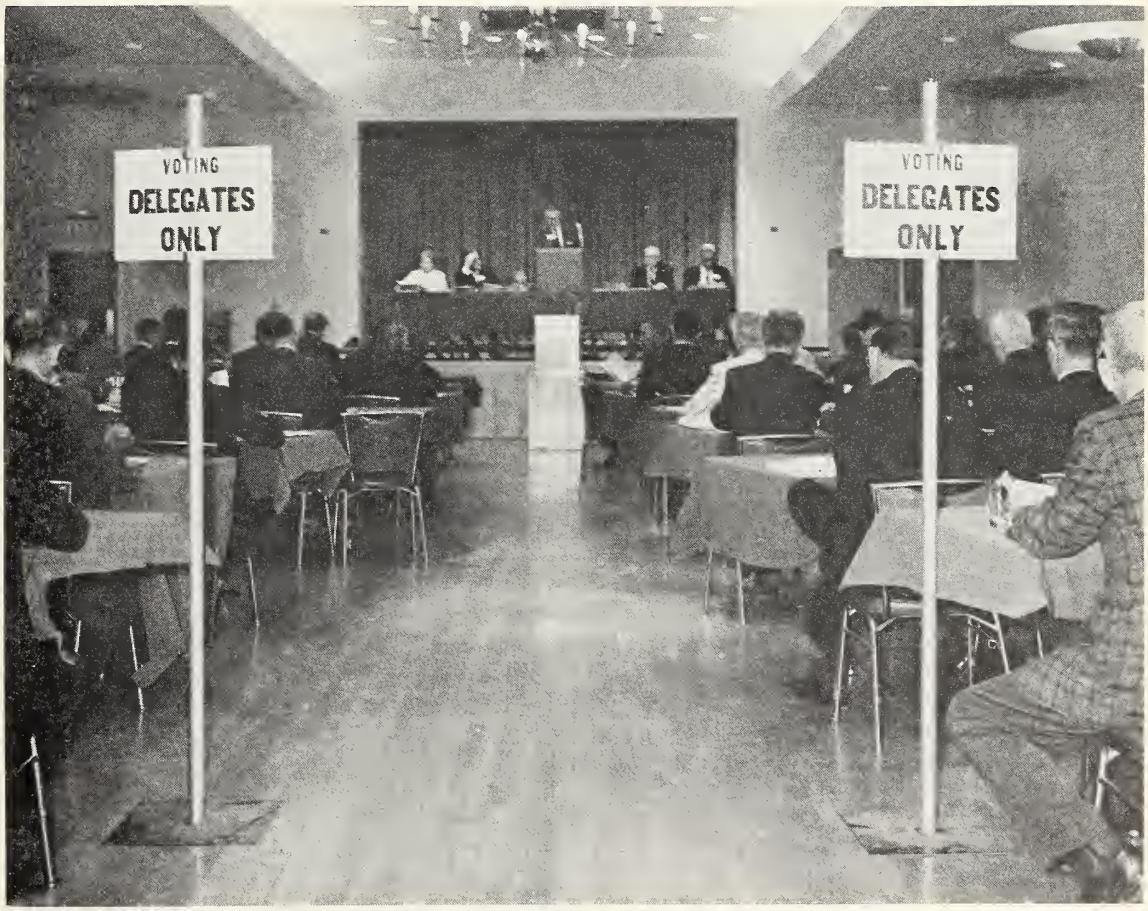
TAKING TIME OUT from the farmal praceedings af the state canventian ta enter the bawling tournament were Dr. and Mrs. Michael Monar (standing left), af Rackpart, and Dr. and Mrs. David Janes, Indianapolis.



THE ANNUAL GOLF TOURNAMENT Manday brought aut many interested "pro" galfers. Dr. Danald I. Dean, Rushville (left), discusses the finer paints af a club with Dr. William Rabertsan, Spiceland (center), and Dr. Frank H. Green, Rushville.



SCIENTIFIC EXHIBITS drew the attention of many interested observers. Dr. Robert L. Dilts, Indianapolis, discusses his exhibit "Observations of Syncardial Therapy" with another interested physician. His exhibit was awarded third prize.



HOUSE OF DELEGATES members listen attentively to the proceedings of their first meeting Monday afternoon.



THE PAST PRESIDENT'S luncheon Tuesday brought together quite a few of the association's former presidents. Shown at the luncheon this year are (left to right) Drs. Elton R. Clarke, Kokomo; M. C. Tapping, Terre Haute; Herman M. Baker, Evansville and F. S. Crockett, Lafayette.



THESE PAST PRESIDENTS were sitting on the other side of the table at the luncheon meeting in their honor. Dr. Maurice Glick, Ft. Wayne, "presided." Also present were (left to right) Drs. Guy A. Owsley, Hartford City; Kenneth L. Olson, South Bend; Paul D. Crimm, Evansville and Karl L. Ruddell, Indianapolis.



FIRESIDE CONFERENCES on Cordio-Respirotory Diseases Tuesday evening were o convention highlight ogain this yeor.



"AMERICANISM" wos the topic of the Wednesdoy ofternoon generol meeting in the Egyptian Room of the Murat Temple. Dr. Mourice Glock prepores to introduce the speokers who were (left to right) Dr. Nicholos Nyorodi, Director of the School of Internotional Studies, Brodley University; Dr. Henry M. Johnson, Minister of Educotion of the Broadwoy Methodist Church ond Wolter Petrovoge, manoger of the Public Affoirs Deportment of the United Stotes Chomber of Commerce.



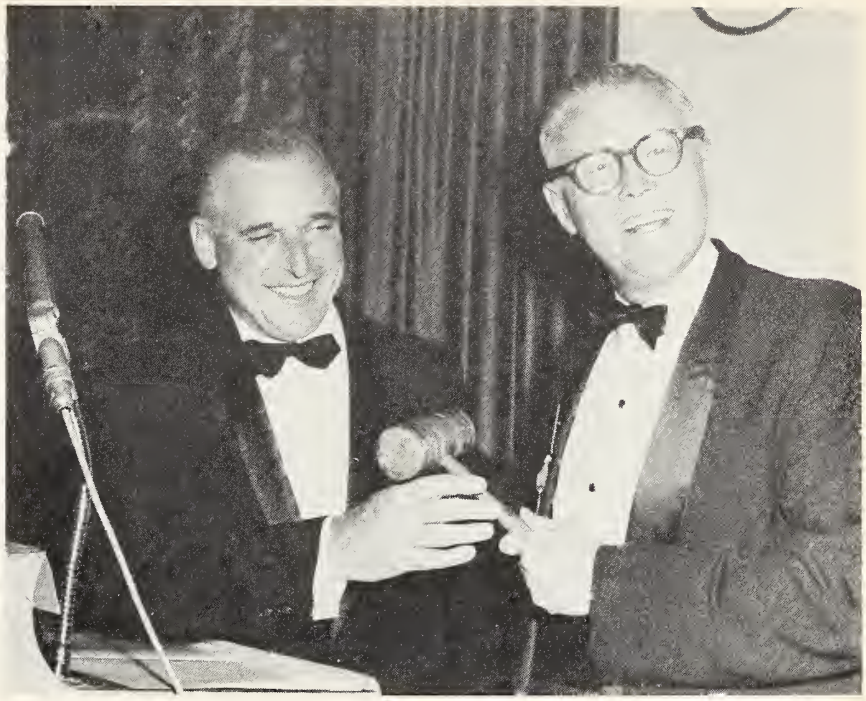
TECHNICAL EXHIBITORS spent many hours extolling the merits of their various products.



DRS. GLOCK AND WOOD welcome guests at the President's Reception Wednesday night.



DR. JOHN M. SULLIVAN pins a corsage on the shoulder of his wife, Zelda, president of the woman's auxiliary, as Dr. and Mrs. Donald Wood look on.



NEW REGIME—Dr. Maurice Glock officially turns over the presidential gavel to Dr. Donald Wood, at the conclusion of the annual banquet.



THE ANNUAL BANQUET—always a convention highlight.

THE WINNERS—114th Annual Convention
Indianapolis, Oct. 14-17

Art and Hobby Show

Oil Painting

First: Jointly to Carol Ann Klepinger, M.D., Indianapolis, and C. P. Schneider, M.D., Evansville

Second: Dr. Klepinger

Third: Dr. Schneider

Black and White Photography

First: J. F. Ling, M.D., Richmond

Second: Morris Wertenberger, M.D., Richmond

Third: Dr. Wertenberger

Color Photography

First: J. F. Ling, M.D., Richmond

Second: Truman Caylor, M.D., Bluffton

Third: Dr. Ling

Crafts

First: Lall G. Montgomery, M.D., Muncie (Fruitwood music stands)

Second: M. O. Scamahorn, M.D., Pittsboro (Barnyard play set)

Hobbies or Collections

First: F. W. Oliphant, M.D., Mt. Vernon (Pictures of antique car collection)

Second: Kenneth Sherer, M.D., Richmond (Toy train collection)

Third: Frank Coble, M.D., Richmond (Orchid plant)

Trap and Skeet Shoot

Trap:

First: Kenneth G. Hill, M.D., New Castle
Second: Claude M. Donahue, M.D., Carmel
Third: Robert J. Stamper, M.D., Anderson

Skeet:

First: Philip R. Myers, M.D., South Bend
Second: Dr. Stamper, Anderson
Third: G. Richard Green, M.D., South Bend

Golf Tournament

First low gross: William Cripe, M.D., Portland
Second low gross: Joseph Karlich, M.D., Arcadia
Low Net: Ivan Lindgren, M.D., Lawrenceburg
Second low net: Herbert Magennis, M.D., Indianapolis

Bowling Tournament

Physicians' Division:

First: Robert Butler, M.D., Indianapolis
Second: V. L. Turley, M.D., Fowler
Third: R. L. Curry, M.D., Indianapolis
Fourth: David Jones, M.D., Indianapolis
Fifth: Glen Ryan, M.D., Indianapolis

Women's Division:

First: Mrs. Berj Antreasian, Indianapolis
Second: Mrs. C. Y. Knowles, Indianapolis
Third: Mrs. W. A. Kurtz, Tipton
Fourth: Mrs. Robert Mouser, Indianapolis
Fifth: Mrs. Richard Shelley, Indianapolis

Scientific Exhibit Award Winners—1963

First Place: Neurovascular Compression Syndromes and Vertebral "Steel" Syndrome
Exhibitor: Erich K. Lang, M.D., Indianapolis

Second Place: Congenital Supravalvar Aortic Stenosis and Associated Pulmonary Vascular Anomalies
Exhibitor: H. Taybi, M.D., Indianapolis

Third Place: Observations of Syncardial Therapy
Exhibitor: Robert L. Dilts, M.D., Indianapolis

Convention Election Results:

Dr. Joe M. Black Named President-Elect

Dr. Joe M. Black, well known Seymour general practitioner, was elected president-elect of the Indiana State Medical Association at the closing session of the ISMA House of Delegates October 17.

Dr. Black, graduated from the Indiana University School of Medicine in 1944, interned at General Hospital and served with the armed forces from 1946 to 1948. He has been a general practitioner in Seymour since 1948.

Former president of the Jackson-Jennings County Medical Society, Dr. Black has also served the association on the Committee on Polio; as vice-chairman, co-chairman and chairman of the Commission on Legislation; secretary, vice-chairman and chairman of the Section on General Practice; ISMA councilor since 1959; two terms as Blue Shield director for the Fourth District and treasurer of I-HOPE since its inception. He is currently the local county health officer.

Also taking office during convention were Drs. Irvin W. Wilkens, Indianapolis, re-elected treasurer; Ottis Olvey, Indianapolis, re-elected assistant treasurer and Kenneth O. Neumann, Lafayette, re-elected chairman of the council. Dr. Ralph V. Everly, Indianapolis, was elected chairman of the Executive Committee.

Elected delegates to the AMA for the two-year term ending December 31, 1965, were Drs. Guy A. Owsley, Hartford City, and Jack E. Shields, Brownstown. Elected alternates to the AMA for the same term were Drs. William B. Challman, Mount Vernon, and John M. Paris, New Albany. Dr. Frank Green, Rushville, was elected alternate delegate to the AMA to fill the unexpired term of Dr. George W. Willison, Evansville, who resigned. Dr. Willison was elected to serve on the Executive Committee for 1963-64.

Councilors who will represent their respective districts until 1966 are Drs. E. T. Edwards, Vincennes, second district; V. Earle Wiseman, Greencastle, fifth district; Donald R. Taylor, Muncie, eighth district, and E. S. Rifner, Van Buren, eleventh district.

Results of the various section elections are as follows:

Section on Surgery: James S. Fitzpatrick, Portland, chairman; Clifford A. Weithoff, Seymour, vice-chairman; Ben King Harned, Jr., Evansville, secretary.

Section on Internal Medicine: E. Paul Tischer, Indianapolis, chairman; Lowell H. Steen, Whiting, vice-chairman; Isaac E. Michael, Indianapolis, secretary.

Section on Ophthalmology and Otolaryngology: Walter J. Aagesen, Anderson, chairman; Sanford C. Snyderman, Fort Wayne, vice-chairman; Lewis E. Morrison, Indianapolis, secretary.

Section on Anesthesiology: M. L. Hicks, Indianapolis, chairman; H. H. Frey, Jr., Lafayette, vice-chairman; Cyril Taylor, Indianapolis, secretary.

Section on General Practice: Eugene S. Rifner, Van Buren, chairman; Leonard W. Neal, Hammond, vice-chairman; Forrest Babb, Stockwell, secretary.

Section on Obstetrics and Gynecology: William A. Karsell, Indianapolis, chairman; Elfred H. Lampe, Fort Wayne, vice-chairman; Frank C. Donaldson, Anderson, secretary.

Section on Public Health and Preventive Medicine: Robert M. Seibel, Nashville, chairman; Kenneth O. Neumann, Lafayette, vice-chairman; John E. Arford, Warsaw, secretary.

Section on Radiology: Walter G. Hunsberger, Lafayette, chairman; Joseph G. Weber, Terre Haute, vice-chairman; Richard A. Silver, Indianapolis, secretary.

Section on Nervous and Mental Diseases: Dwight Schuster, Indianapolis, chairman; Ted Hill, South Bend, vice-chairman; Gordon T. Brown, Indianapolis, secretary. ◄

President's Address

MAURICE E. GLOCK, M.D.
Fort Wayne

ACCORDING TO CUSTOM, it becomes my privilege to spend a few minutes with you at the close of my term of office. To have served as your president for the past year has been a very gratifying and rewarding avocation. I would like to take this opportunity to express my sincere thanks to all of you as individuals, to those loyal and hardworking members of the commissions and committees who carry on the full program of this alert and vigorous association, to the cooperative and diligent officers of the association, to the ever-helpful and willing members of the Woman's Auxiliary, and to the sincere, able, and devoted headquarters staff.

I will not bore you with a recital of the achievements of the past year, as these have been documented through the reports of the commissions and committees and the reports of the Chairman of the Executive Committee and the Chairman of the Council. To me this has been a harmonious year with all working in accord for a common goal. Probably the high point of the year for me was the excellent program put on by the sub-committee on Rural Health, Junior Senior Day. A revived program, the County Officers Conference showed considerable promise and should again become a yearly event but should be held in a more clement season of weather. An important first was the Indiana Congress on Mental Health which was sponsored by our association, which is assuming the lead in improving the mental health program.

The Legislative Commission did an outstanding job and accomplished 100% of their program in the recent session of the Legislature. The Commission on Aging is furnishing superior leadership in our state with allied groups.

As for the rest, res ipsa loquitur—it speaks for itself.

Several days ago a nationally prominent (or notorious) labor leader appeared in my home community for the purpose of organizing a non-partisan political action group to further the interests, aims and philosophies of his particular union. He received considerable front page publicity in the papers and full coverage through radio and television. I imagine he will have no difficulty in raising the funds he feels necessary to his proposed program, and I doubt if he has much fear of the Hatch Act.

At this time I have a rather wonderful quote from Poge: "We have met the enemy and they are us." As intelligent, fairly well educated citizens we have the duty and right to express our opinions and attempt to promote our principles and philosophies to become a part of good government. However, there is too much complacency and apathy among our members — and many are defeatist and feel that nothing is possible as individuals or as a group to fulfill any of our aims. Thus we find that only approximately one-third of our membership is working determinedly for the public good and the good of our association. I am sure that those who get the most from our association are those who are in the active group of workers.

An enviable opportunity is becoming available for every member of our state association to become an active participant in the affairs of our association through the "Barnstormer" program and "Operation Hometown." If these are unfamiliar terms to you please consult with your county society officers and join the team. The following quote, taken from "Seven Days in May" is quite applicable: "Democracy

works only when a good majority of citizens are willing to give thought and time and effort to their government. The nuclear age, by killing man's faith in his ability to influence what happens, could destroy the United States even if no bombs were ever dropped."

As one sits in the president's chair and watches the panorama of the year's activity unfold, one is bound to speculate at times what further activities or programs would improve the entire operation and of course the first thing that comes to mind is to elect a more dynamic and fruitful president, which you did so admirably one year ago, in choosing my successor. I have a few suggestions that might be worthy of study and possible implementation.

We are in a period of considerable social change. The population of our state and country is growing very rapidly. Population has shifted to the urban areas and on into suburbia and there is considerable shifting from one region to another. Our membership is growing rapidly, with a gain of over 40% in the past 20 years. There have been and there will be more tremendous gains in medical knowledge and technics. More use will undoubtedly be made of paramedical personnel and possibly the physician will undoubtedly be able to delegate some of his functions so that he can efficiently serve more people. As an association we have been able to keep abreast of our problems by finding solutions as we go along, but this leads to delay and sometimes allows our critics to charge that we are reactionary and behind the times. I believe that a Future Planning Committee, which could project some of the future activities, would be of great value to our association.

I also feel that it would be well if we could accurately assess our accomplishments and find where we have made our greatest gains each year and examine the areas where more should have been accomplished. That which is good could be disseminated among our entire membership for the improvement of all programs, and constructive advice and action could be taken in the areas of low accomplishment. This evaluation might possibly be done by the Executive Committee or by the Council, but I doubt it as they are too close to the situation and too deeply involved in all of the activities to take a suitable detached view. Possibly a committee of the House of Delegates could satisfactorily perform these functions, which I would call an Audit and Review Committee.

Speaking as a two-time loser to unexpected illness, I would like to urge that we make a more determined and continued effort to make physicians more aware of better and more frequent health inventories. Many disabilities and indeed, many deaths could be prevented by a more intelligent outlook to our own health. We advocate health inventories for executives and do not apply this to ourselves who are equally valuable to our communities.

Finally, I would like to recommend that very careful studies be made as to the problem of the physician who through emotional or mental illness or through senility becomes unfit to practice a safe and adequate type of medicine and still is legally qualified to practice. Limitation of hospital privileges may not give adequate safeguards to the public and grievance or ethic committees are not able to take any definitive action if the physician is not a member of the society. Fortunately, this is a rare problem but still worth continued study and concern.

In conclusion, I would like to repeat a gimmick Dr. Walter Portteus used eight years ago. This is done in affectionate memory and honor to the memory of Dr. Portteus, who was one of our outstanding leaders and who rendered yeoman service to this association for so many years. Each of you will find a package of matches at your plate. Please pick it up so that you will have it in your hand. (Lights out please.) I will light one match. Notice that while each of you can see the light it has little effect in illuminating the entire room. Now I am going to count to three and when I say three will each of you strike one match? There—this gives you concrete evidence that while your own effort may be

small—yet when added to that of others the results are startling.

I pray that all of you will continue to shed your light on our problems next year and in the years to come and that we have complete unity of purpose so that in the end we will persevere in that which we know to be just and true.

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House of Delegates Proceedings

INDIANAPOLIS SESSION

October 14-17, 1963

The House of Delegates held three meetings during the 114th annual convention in 1963. The House convened at 3:00 p. m., Monday, October 14, 1963, in the Ballroom of the Columbia Club, Indianapolis, again at 2:00 p. m., Tuesday, October 15, 1963, in the Ballroom of the Columbia Club, and at 3:00 p. m., Thursday, October 17, 1963, in the Candidates Room, Murat Temple, Indianapolis, with the president, Dr. Maurice E. Glock, Fort Wayne, presiding.

Dr. John M. Paris, of New Albany, gave the invocation at the first and second meetings.

Credentials Committee Reports

On motion duly made and seconded, attendance slips signed by the delegates were accepted in lieu of a roll call at the first meeting. Dr. O. T. Scamahorn, chairman of the Reference Committee on Credentials, reported 102 delegates, four past presidents, ten councilors, the president, president-elect, the treasurer, two delegates to the AMA, the editor of *The Journal*, five alternate councilors, and four guests present at this meeting.

At the second and third meetings it was voted that the attendance slips filled in by the delegates would constitute the roll call.

At the second meeting Dr. Scamahorn reported 98 delegates, seven past presidents, eight councilors, the president, the president-elect, two AMA delegates, one alternate councilor, and four guests present.

In attendance at the third meeting were 86 delegates, three past presidents, six councilors, the president, the president-elect, the treasurer, two AMA delegates, the editor of *The Journal* and four alternate councilors.

According to Chapter IV, Section 3, of the Bylaws, 50 delegates constitute a quorum. The House of Delegates, therefore, was declared open and ready for the transaction of business.

The president read Chapter XXXII, Section 1, of the Bylaws, and Article XIV of the Constitution regarding amendments to the Bylaws and the Constitution.

In Memoriam

The House stood for a moment in silent prayer in memory of the following physicians who had served as members of the House of Delegates, or in an official capacity in the association, and who had passed away since the 1962 annual convention:

WILLIAM E. AMY, Corydon. Secretary, Harrison-Crawford County Medical Society, 1911-22, 1927-37, 1939-50, 1954-55; delegate, Harrison-Crawford County, 1934-52, 1954-56, 1958-62.

ARA C. BADDERS, Portland. Secretary, Jay County Medical Society, 1926-27.

JAMES F. BALCH, Indianapolis. Member, Committee on State Fair, 1935; delegate, Marion County, 1938-39, 1946-47; member, Editorial Board, 1940-42; member, Committee on Rehabilitation Services, 1945; member, Medical Advisory Committee for Vocational Rehabilitation, 1946; member, Committee on Venereal Disease, 1952.

JAMES BIVIN, Mooresville. President, Morgan County Medical Society, 1957.

JOHN C. CARNEY, Monticello. Member, Board of Appeals on Patient-Physician Relations, 1952; member, Committee on Veterans Affairs and Rehabilitation, 1953; member, Committee on Public Policy and Legislation, 1955; member, Commission on Voluntary Health Agencies, 1962.

JOSEPH H. CLEVENGER, Muncie. Member, Committee on State Fair, 1935; secretary, 1939 and 1949, vice-chairman, 1940 and 1950, and chairman, 1941 and 1951, Section on Surgery; secretary, Delaware-Blackford County Medical Society, 1947-1950; member, Committee on School Health and Physical Education, 1948-52; member, Committee on Industrial Health, 1953, 1955-56; member, Commission on Medical Education and Licensure, 1958-59.

THOMAS L. COOKSEY, Crawfordsville. Secretary, Montgomery County Medical Society, 1915.

LADISLAUS J. DANIELESKI, Gary. Member, Committee on Legislation and Public Policy, 1931-33.

ROBERT R. DAVIES, New Castle. Member, Committee on Diabetes, 1956-57; secretary, 1957, and president, 1959, Henry County Medical Society.

PARVIN M. DAVIS, New Albany. Member, Committee on Credentials, 1946-47; chairman, Cancer Committee, 1953.

WILLIAM DE RENNE, Newport. Delegate, Parke-Vermillion County, 1957; secretary, Parke-Vermillion County Medical Society, 1958.

ALFRED H. ELLISON, LaJolla, California (formerly South Bend). President, St. Joseph County Medical Society, 1933-34; member, 1938, and chairman, 1939-43, Committee to Study Cultists and Irregular Practitioners; member of the Council, 1939-49, and Chairman of Council, 1947-49; member, Executive Committee, 1947-51; member, Committee on Industrial Health, 1944; member, Committee on Medical Relief, 1944-46; member, Committee on Budget, 1947-49; president, Indiana State Medical Association, 1951; delegate to AMA, 1952, 1955, 1956; alternate delegate to AMA, 1953; member, Committee of Medical Education and Hospitals, 1953; member, Committee on Anti-National Health Insurance, 1954.

LEONARD A. ENSMINGER, Indianapolis. Member, Committee on Industrial and Civic Relations, 1920; member of Council, 1933-35; chairman, Committee on Graduate Education, 1937-38; member, Liaison Committee of the Division of Services for Crippled Children, 1938-44; member, Committee on Crippled Children Services, 1939, 1953.

WAKEFIELD D. GERRISH, Clinton. Secretary, Parke-Vermillion County Medical Society, 1933-35, and president, 1954; member Committee on Prevention of Traffic Accidents, 1941.

ROBERT D. HOWELL, Indianapolis. Delegate, Marion County, 1949-51; secretary, 1960, vice-chairman, 1961, chairman, 1962, and member, 1963, Commission on Inter-Professional Relations.

EARL B. JEWELL, Birmingham, Michigan (formerly Logansport). Delegate, Cass County, 1945-47, 1949-52, 1954-55; member, Committee on Maternal and Child Health, 1949; member, Committee on Necrology, 1950-52, 1957.

HARRY K. LANGDON, Indianapolis. Member, Committee on Scientific Demonstrations, 1914-15; member, Committee on Arrangements, 1924.

HENRY S. LEONARD, Indianapolis. Delegate, Marion County, 1935-36; chairman, Committee on Civilian Defense, 1942-43.

LLOYD C. MARSHALL, Mt. Summit. Member, Anti-Tuberculosis Committee, 1945-47; delegate, Henry County, 1948; member, Committee on Tuberculosis, 1948-52; member, Board of Appeals on Patient-Physician Relations, 1952; member, Grievance Committee 1956-58, 1960-61.

MAURICE G. MURPHY, Morgantown. Delegate, Morgan County, 1939; member, Committee on Traffic Safety, 1955.

WALTER L. PORTTEUS, Franklin. Secretary, Johnson County Medical Society, 1926-38; member, Committee on Postgraduate Study, 1933; member, Committee on Graduate Education, 1934-35; delegate, Johnson County, 1934-37; member, Committee on Secretaries' Conference, 1936; secretary, 1935-38, vice-chairman, 1939, and chairman, 1940, Section on Medicine; member, Advisory Committee to the Bureau of Maternal and Child Health of Indiana State Board of Health, 1941-43; member of Council, 1943-47; member, Committee on Prepayment of Medical and Surgical Care, 1945; member, Executive Committee, 1947-49, 1952, 1954, and chairman, Executive Committee, 1950-51, 1953 and 1955; president, Indiana State Medical Association, 1955; chairman, Committee on School Health and Physical Education, 1948; member, AMA Campaign Coordinating Committee, 1949-52; member, Preceptorship Committee, 1953; member, Anti-National Health Insurance Committee, 1953; member, Committee on Constitution and Bylaws, 1954; member, Liaison Committee with Labor, 1954-1956-57; member, Indiana Inter-Professional Health Council, 1955; chairman, Pubicity Committee, 1956; member, Grievance Committee, 1956 and 1958; vice-chairman, Commission on Legislation, 1958-59; alternate delegate to AMA, 1958-61; delegate to AMA, 1962-63; co-chairman, Commission on Legislation, 1960-61.

ROSCOE L. SENSENICH, South Bend. Alternate delegate to AMA, 1931; delegate, St. Joseph County, 1932-37; chairman, Medical Section, 1933; member, Public Relations Committee, 1934; president, Indiana State Medical Association, 1936; member, Executive Committee, 1935-36; member, Budget Committee, 1935-37; chairman, Liaison Committee with Indiana Crippled Children's Bureau, 1938; member, Liaison Committee with Division of Services for Crippled Children, 1939-44; member, Liaison Committee with Indiana State Department of Public Welfare, 1939-40; president of the American Medical Association, 1946.

HARRY R. STIMSON, Gary. Secretary, Lake County Medical Society, 1953-54; president, Lake County Medical Society, 1955; delegate, Lake County, 1948, 1950-60; member, Committee on Medical Care Insurance, 1953; member, Committee on Public Relations, 1954-56; member, Review Committee for PL 569 Claims, 1957; member, Commission on Governmental Medical Services, 1958-61; member, Executive Committee, 1961-62; president, Indiana State Medical Association, 1962; member, Student Loan Committee, 1962; member, Grievance Committee, 1963.

WILLIAM R. TAYLOR, Richmond. Member, Committee on Venereal Disease, 1944; vice-chairman, Section on Public Health and Preventive Medicine, 1962.

GEORGE T. TENNIS, Greencastle. Delegate, Putnam County, 1952.

JOHN R. THRASHER, Indianapolis. Member, Committee on Pathology, 1909-10; member, Committee on Scientific Demonstrations, 1914-15; member, Committee on Scientific Exhibit, 1916.

GEORGE L. VENABLE, North Manchester. President, Wabash County Medical Society, 1955.

ALFRED A. WADE, Howe. Secretary, LaGrange County Medical Society, 1928-30, 1942-50; delegate, LaGrange County, 1947; president, LaGrange County Medical Society, 1956.

DULANIA S. WIGGINS, New Castle. Secretary, Henry County Medical Society, 1912.

HALDON C. WOODS, Markle. President, Huntington County Medical Society, 1956.

1962 Minutes

On motion of Drs. Paris and Wilder, minutes of the meetings held at French Lick on October 7 and 10, 1962, were approved as printed in the December, 1962, *Journal.*

Introduction of Guests

MR. DONALD G. MODE, president, Indiana Chapter of Student AMA

HORATIO T. PEASE, M.D., Wadsworth, Ohio, president, Ohio State Medical Association

GUY SPRING, Indianapolis, Blue Cross Hospital Service

L. E. CONVERSE, Indianapolis, Indiana Blue Shield

RICHARD KILBORN, Indianapolis, Indiana Blue Shield

KENNETH FLY, Indianapolis, Indiana Blue Shield

FREMONT POWER, *Indianapolis News*

HARRISON ULLMAN, *Indianapolis Star*

JAMES C. COURTNEY, Indiana State Department of Revenue

Mr. Courtney addressed the House on the two percent sales tax.

1963 Reference Committees

The chairman announced the appointment of reference committees for the 1963 session as follows:

Sections and Section Work:

Howard S. Williams, Indianapolis (Marion), *Chairman*
Michael Shellhouse, Gary (Lake)
Gordon S. Fessler, Rising Sun (Dearborn-Ohio)
Earl W. Bailey, Logansport (Cass)
William R. Shaffer, Greensburg (Decatur)

Rules and Order of Business:

Lowell W. Painter, Winchester (Randolph), *Chairman*
Thomas M. Brown, Muncie (Delaware-Blackford)
Robert S. McElroy, Princeton (Gibson)
Forrest D. Ellis, North Vernon (Jackson-Jennings)
Theodore J. Smith, Whiting (Lake)

Medical Education and Hospitals:

Stuart R. Combs, Terre Haute (Vigo), *Chairman*
Robert A. Garrett, Indianapolis (Marion)
James W. Denny, Indianapolis (Marion)
A. E. Stouder, Kempton (Tipton)
Robert M. Seibel, Nashville (Bartholomew-Brown)

Legislation:

Truman E. Caylor, Bluffton (Wells), *Chairman*
Bill E. Freeland, Batesville (Ripley)
Otis R. Bowen, Bremen (Marshall)
Richard B. Juergens, Fort Wayne (Allen)
Donald R. LaFollette, New Albany (Floyd)

Public Relations:

Wendell C. Stover, Boonville (Warrick), *Chairman*
David J. Dukes, Corydon (Harrison-Crawford)
Lloyd L. Hill, Peru (Miami)
J. Robert Ball, Fort Wayne (Allen)
Thomas D. Armstrong, Michigan City (LaPorte)

Hygiene and Public Health:

Donald G. Mason, Angola (Steuben), *Chairman*
Philip J. Rosenbloom, Gary (Lake)
Joseph F. Ferrara, Franklin (Johnson)
T. Neal Petry, Delphi (Carroll)
Harry R. Baxter, Seymour (Jackson-Jennings)

Amendments to Constitution and Bylaws:

Guy A. Owsley, Hartford City (Delaware-Blackford), *Chairman*
M. C. Topping, Terre Haute (Vigo)
Kenneth L. Olson, South Bend (St. Joseph)
Paul D. Crimm, Evansville (Vanderburgh)
Karl R. Ruddell, Indianapolis (Marion)

Reports of Officers:

G. O. Larson, LaPorte (LaPorte), *Chairman*
David Hadley, Indianapolis (Marion)
Leslie M. Baker, Aurora (Dearborn-Ohio)
Fred Smith, Jr., Tell City (Perry)
Thomas Hamilton, Columbia City (Whitley)

Credentials:

O. T. Scamahorn, Pittsboro (Hendricks), *Chairman*
Louis C. Bixler, South Bend (St. Joseph)
C. Philip Fox, Washington (Daviess-Martin)
Myron H. Nourse, Indianapolis (Marion)
Dean K. Stinson, Rochester (Fulton)

Insurance:

Floyd A. Boyer, Indianapolis (Marion), *Chairman*
Wemple Dodds, Crawfordsville (Montgomery)
R. Case Hammond, Evansville (Vanderburgh)
Peter R. Petrich, Attica (Fountain-Warren)
John W. Beeler, Indianapolis (Marion)

Miscellaneous Business:

Guy B. Ingwell, Knox (Starke), *Chairman*
S. E. Bechtold, South Bend (St. Joseph)
Richard Wagner, Huntington (Huntington)
James M. Leffel, Indianapolis (Marion)
Frank H. Green, Rushville (Rush)

Amendment to Constitution

By roll call vote of 113 to 2, the House adopted the amendment to Article IV, section 2, of the Constitution. As amended this Article reads as follows: (the words added are italicized)

"Sec. 2. *Active Members.* The active members of this association shall be the members of the component county medical societies, *who hold an unlimited license to practice medicine, which is in full force and effect; provided, however, that each is a citizen of the United States of America or has filed his declaration of intention to become a citizen and his first citizenship papers are in full force and effect. No person shall be qualified for membership in a county society who is not qualified for membership in the Indiana State Medical Association* and no county medical society shall grant active membership therein on a basis that does not include membership in the Indiana State Medical Association."

Reports of Reference Committees

REPORTS OF OFFICERS

The following matters were referred to the Reference Committee on Reports of Officers. All reports will be found on the pages indicated in the September, 1963, Vol. 56, No. 9, *Journal* of the Indiana State Medical Association, with the exception of the president's address, which will be found on pages 1580-82 of the December, 1963, *Journal*. The addresses of the president-elect and the president of the Woman's Auxiliary, and the supplementary report of the treasurer, are printed herewith.

President's address
President-elect's address
Executive Secretary (page 1155)

Treasurer (pages 1155-1158) and supplemental report presented by Dr. Irvin W. Wilkens, treasurer:

"The financial report as shown in your Handbook is, as usual, a maze of figures. It might be worthwhile to give you a brief summary of the financial state of the association. As of a year ago we were somewhat dubious about how we would get along financially, and I'm happy to say now we are in the black, and it looks as though we are going to continue as such in the future.

"At the present time our assets total $158,-495.63, which is made up of cash, $21,551.02, securities, $63,000.00, $20,000.00 of which are in escrow for Medicare. We have $40,000.00 on interest with the building and loan associations which will give us 4% interest as of December 30 of this year. We have advanced to *The Journal* fund, $15,226.91. Of this amount, our obligations are only that of $60,924.90, which is made up pri-

marily of a loan at 5% from the bank of $63,000.00. *The Journal* fund owes the General Fund $15,226.91, as I stated.

"I am particularly pleased to state that since the opening of the new state office our budgeted amounts to the various commissions and committees have been under what we had budgeted, which is giving us a savings.

"We also have a deficit in *The Journal* fund, $2,195.93, which in a sense is not quite true in that, if you recall, the House of Delegates voted an increase in the subscription rate of *The Journal*, and this is on a nine-month basis. We have not collected it on the basis of twelve months. So this probably will take care of that deficit in the budget of *The Journal*. I have no other particular figures. I thought you should have a little more up-to-date account of the finances."

At this time the chairman announced that Dr. Ottis N. Olvey, assistant treasurer, had collected over $6,000.00 for the building fund during the year. (Applause)

Chairman of Council (pages 1158-1161)
Councilors' reports (pages 1161-1166)
Executive Committee (pages 1170-1173)
Address of President of Woman's Auxiliary
Journal Editor (page 1166)
Delegates to AMA (pages 1166-1169)
Remarks of President of Indiana Student AMA

President's Address

The address of the president, Dr. Maurice E. Glock, is printed on pages 1580-82 of the December, 1963, *Journal* of the Indiana State Medical Association.

President-Elect's Address

DR. DONALD E. WOOD, president-elect, addressed the House as follows:

Members of the House of Delegates: It certainly is a wonderful pleasure for me, as you know, to assume the job as president of this organization. To me it offers a great challenge and I think we must have a definite program. I hope that we can do as well as Dr. Glock did in his year's activities which I am sure he will review with you on Wednesday night.

The program that I have outlined—which you have outlined really—is, I think, a very forward-looking program and one in which we can show our interest in the health of the citizens of our state and our local communities. The first one, and I feel the foremost one, has to do with our program in mental health. This is going to be the program in which we are going to place the greatest emphasis. As you know, we have forthcoming in the next few weeks, six regional programs and I hope you all will participate and give impetus in your locality.

Our next program is that of the improvement of medical care in our correctional institutions. We should also study definitely an intensified program for the home care of the aged. As you know we are going to have a state meeting in November along these lines.

We should study also a fuller immunization program for our school-age children.

I think we also are going to expand our loan program for medical students.

Another new program that I would like your help is in the high school debate program, the subject this next year is going to be "Medical Care for the Aged." I think this is one program that you can do a great deal of good in by giving information and counsel to those students who come to you for this help.

As you know, next year is an election year. Of course we want to be active in the field of legislation and participate in the party of our choice.

The next one that I think that we need to investigate is the problem of narcotics. We will have a lot to hear about that throughout the year.

Finally, the study that we are making of the voluntary health agencies will be intensified. As you know the commission has been doing a fine job in this field and has presented testimony to our House of Delegates of the AMA.

So I do think that we have a great challenge facing us and I am asking for your help. Thank you very much. . . .

Woman's Auxiliary Presidential Address

MRS. JOHN M. SULLIVAN, Terre Haute, president of the Woman's Auxiliary to the Indiana State Medical Association, addressed the house as follows:

I personally and for the auxiliary thank Dr. Glock, Dr. Wood and Dr. Covalt, our advisor, for the help and guidance they have given us throughout the year. And a special note of thanks also to Mr. Waggener and to the office staff of ISMA for their assistance.

The late great architect, Frank Lloyd Wright, has said that early in his career he made the choice against exhibiting hypocritical humility in favor of honest arrogance. I do not hesitate to show honest arrogance in my pride for the accomplishments of the medical auxiliary.

In legislation, long distance calls to county chairmen, requesting action in regard to Kerr-Mills legislation during the session of the state legislature, elicited immediate and gratifying response. A continuing program of education for the public on the King-Anderson bill by talking with our friends, by providing groups with qualified speakers, and study groups within our own auxiliaries is being carried out in most of our county units. Our 2,814 members are aware that the fight to preserve the free enterprise system must not be lost. Once lost it is not retrievable. A large majority of our county auxiliaries are waiting for assignments from the medical society to help with "Operation Hometown."

The American Medical Association—Education

and Research Foundation has been a project since 1952. Each year the Indiana auxiliary has increased its total contribution. For the fiscal year ending April 30, 1963 we had contributed $15,168.43. With the $4,000.00 already contributed toward this year's total, we are on the way to another substantial increase. The Christmas card sales have exceeded all expectations. We are emphasizing the importance of designating the contributions for the AMA Guaranteed Student Loan Fund. With one in every nine medical students a borrower, many dollars are needed to put on deposit in order that the banks can make available the needed amount.

The recruitment of capable young people into the para-medical fields has been a continuing service of the auxiliary. Thirty-two Future Nurses' Clubs were sponsored by the county auxiliaries last year with $11,000.00 given to helping 62 students. The film, "I Am a Doctor," was shown in many high schools with a most favorable reaction from the students. Printed material from national headquarters is made available to stimulate interest in the para-medical careers.

An outstanding job was done in International Health Activities. Since it was a new endeavor that went beyond our great expectations, it has been impossible to keep an accurate record of the total contributions. Literally tons of your sample drugs, either given freely by you or confiscated by your wife, were collected and sent to World Medical Relief in Detroit. Used instruments, office equipment, hospital equipment and supplies, braces, crutches and eyeglasses have been collected. These are only a few of a long list of needed para-medical supplies that were and are now being collected to help the sick-poor in the world. The interest shown by the members in this project has been prolific and the results are heart-warming. Newspaper publicity was excellent.

Mental Health activities include many projects. About three-fourths of our auxiliaries give gifts to patients in mental institutions at Christmas. In those counties where a state institution is located, many members work as volunteers in the hospital. Speakers have been invited to some of the meetings and available films have been used to further the education and understanding of this health problem. We hope to have a representative or two from each auxiliary attend the Mental Health regional programs the latter part of this month and the early part of November.

In our community service projects such as civil defense, rural health, and safety, there is some overlapping of objectives. The prime objective, of course, is one of education, first indoctrinating our own members, who, in turn, can help other groups with the educational program. Many county auxiliaries cooperate with allied health organizations with the health programs for the public. Many auxiliaries sponsor Health Days or Health Fairs. One auxiliary met with the Farm Bureau women at an all-day meeting on a farm, learning the hazards of farm equipment, in order to promote safety programs. Members helped with community projects, such as the Sabin Oral Vaccine program, blood banks, eye testing in the schools, Red Cross, church work and hospital auxiliaries. Whenever there is a service to be done for the community our members are there, always ready to help.

Our three area workshops held last September were quite successful. The state officers and committee chairmen presented the auxiliary program to the representatives of the county auxiliaries. The county officers chose that part of the program best suited to their group and the needs of their community. The meeting of the central area was held in the ISMA Building. AMPAC's political education film, the "Barnstormer" was shown during the afternoon sessions. Many inquiries were made by the county officers as to the availability of this film for showing at county meetings.

The Board of Directors of I-HOPE has asked the auxiliary to take the initiative in setting up joint meetings on the county level, at which time the political education film will be shown. Letters have been sent to all county presidents by Mrs. Thomas Johnson, our Auxiliary Liaison to I-HOPE, and we are anticipating whole-hearted response.

This is only a brief summary of our many undertakings and I wish to end with a quote from our national president, Mrs. C. Rodney Stoltz, "In the final analysis, service is an affair of the heart and an act of conscience. Our conviction and our surrender to this way of life will lead us to communicate, to project, to grow, to influence for good."

REFERENCE COMMITTEE ACTION

Dr. G. O. Larson, chairman, presented the following report:

The Reference Committee on Reports of Officers reviewed the reports referred to them found on pages 81-124 in the Handbook plus supplemental reports, the address of the President, the President-elect, the President of the Woman's Auxiliary, and the President of the Indiana Student AMA.

Your reference committee commends these reports and addresses most highly. The reports reflect the devotion to responsibilities of the officers of our association, the quality of administration of the staff, and the diligent work of many members of the association as they discharged their duties to the society.

Mr. President, I recommend the adoption of this portion of the report.

(Motion seconded by many, put to vote, and carried.)

It is the desire of your committee to emphasize the following two matters:

1. It is the opinion of your committee that two paragraphs of the President's address which, by the way, you have not as yet had the pleasure of hearing, should be implemented as soon as possible. These are the paragraphs recommending a

Future Planning Committee and an Audit and Review Committee.

Mr. President, I recommend the adoption of this portion of the report.

(Motion seconded by many, put to vote, and carried.)

2. Considerable study was given to annual and supplemental reports of the treasurer. The members of this committee view with concern the financial status of this association. It would appear that the lowered reserves of this association and in view of the constantly increasing services rendered by the organization that some time in the near future there will have to be an upward revision of the dues structure.

Mr. President, I move the adoption of this portion of the report.

(Motion seconded by many, put to vote, and carried.)

Mr. President, I move the adoption of this report as a whole.

(Motion seconded by Dr. Paris, put to vote, and carried.)

I wish to thank the members of my reference committee for their participation and deliberation. Members are: David Hadley, Leslie M. Baker, Fred Smith, and Thomas Hamilton.

SECTIONS AND SECTION WORK

Dr. Howard S. Williams, chairman, presented the following report:

We had no work assigned to this committee; we therefore have no report.

I move that the report be accepted.

(Motion seconded by many, put to vote, and carried.)

RULES AND ORDER OF BUSINESS

Dr. Lowell W. Painter, chairman, presented the following report:

The Committee on Rules and Order of Business had no business, and I move that this report be accepted.

(Motion seconded by many, put to vote, and carried.)

MEDICAL EDUCATION AND HOSPITALS

The following matters were referred to the Reference Committee on Medical Education and Hospitals. All reports will be found on the pages indicated in the September, 1963, Vol. 56, No. 9, *Journal* of the Indiana State Medical Association. Resolutions introduced before the House and referred to this committee are printed herewith.

Student Loan Committee (pages 1173-1174)

Commission on Medical Education and Licensure (page 1190)

Commission on Special Activities (pages 1190-1191)

Resolution No. 1—Improving Patient Care

Resolution No. 15—Study of Future Needs of Medical Education in Indiana.

REFERENCE COMMITTEE ACTION

Dr. Stuart R. Combs, chairman, presented the following report:

Student Loan

The first item for consideration of this committee was the report of the Student Loan Committee. The following resolution was a part of the report of the Student Loan Committee:

Interest Rate on Student Loans

WHEREAS, at present a student loan is without interest until: (a) withdrawal from medical school, (b) withdrawal from hospital internship, or (c) the completion of internship, and thereafter, including those notes past due, bears only 2% interest per annum, and

WHEREAS, the very low interest rate after maturity has acted as a deterrent or obstacle to collection and thereby has deprived the fund of moneys to lend to other medical students in need, and

WHEREAS, this committee believes that it would facilitate collecting said notes at maturity if the interest rate after maturity be increased, as an incentive to the borrower to make payment and thereby keep the fund revolving,

IT IS THEREFORE recommended that said loans mature:

(a) One (1) month after ceasing to be an enrolled medical student, or

(b) One (1) month after withdrawal from hospital internship, or

(c) Twelve (12) months after completion of internship.

That they bear 4% simple interest per annum for one (1) year after maturity and 6% simple interest thereafter until paid, with attorney fees in the event suit becomes necessary to compel collection.

Because of possible conflict of actions by another committee, it is requested that the report of our actions be deferred until after the report of the Committee on Amendments to the Constitution and Bylaws.

Mr. President, I move the deferral of this section of this report.

(Motion seconded by many, put to vote, and carried.)

Medical Education

Next was the report of the Commission on Medical Education and Licensure. The report of the Commission on Medical Education and Licensure was read and reported on favorably by this committee.

Mr. President, I move the adoption of this section of this report.

(Motion seconded by many, put to vote, and carried.)

Special Activities

Next was the report of the Commission on Special Activities. The report of the Commission on Special Activities was read and reported on favorably.

Mr. President, I move the adoption of this section of this report.

(Motion seconded by many, put to vote, and carried.)

Resolution No. 1

Introduced by: COMMISSION ON MEDICAL ECONOMICS AND INSURANCE

Subject: IMPROVING PATIENT CARE

WHEREAS, The Indiana State Medical Association historically has been a leader in the improvement of patient care, and

WHEREAS, costs of medical care can not be properly judged without being related to the quality or effectiveness of patient care, and

WHEREAS, both subjects have been the object of special studies by various lay and professional agencies, and

WHEREAS, many separate efforts to improve patient care are being made, e.g., postgraduate physician programs, professional society meetings, Joint Commission on Accreditation of Hospitals, AMA-Nursing Home Association Accreditation Program, and

WHEREAS, Voluntary Health Insurance's expected growth will be in non-hospitalized medical services which places even more emphasis upon the capability of the physician, and

WHEREAS, the Indiana State Medical Association is the natural organization to provide needed leadership and coordination of the many separate efforts in Indiana; NOW THEREFORE

BE IT RESOLVED, that the House of Delegates instruct the appropriate Commission to make a study of all efforts and factors having a direct bearing upon improving the continuing educational programs for physicians and other activities which augments patient care and recommend any necessary, constructive changes which it deems feasible.

REFERENCE COMMITTEE ACTION

Dr. Stuart R. Combs, chairman, presented the following report:

Next was the resolution on "Improving Patient Care," Resolution No. 1, pages 75-76 of the Handbook. The committee urges the adoption of this resolution.

Mr. President, I move the adoption of this section of this report.

(Motion seconded by many, put to vote, and carried.)

Resolution No. 15

Introduced by: MARION COUNTY MEDICAL SOCIETY

Subject: STUDY OF FUTURE NEEDS OF MEDICAL EDUCATION IN INDIANA

WHEREAS, The number of doctors should increase in relation to the total population,

WHEREAS, the projected needs for training physicians in our country and state surpasses our presently available facilities,

WHEREAS, the rapid growth in our state has extended the present training facilities to the maximum, creating a serious threat to the present high standards of medicine in our state,

NOW, THEREFORE BE IT RESOLVED, that the House of Delegates urge the Governor of the State of Indiana to take immediate steps to appoint a qualified study committee of representative citizens of our state to study and report the future needs of medical education in the State of Indiana.

REFERENCE COMMITTEE ACTION

Dr. Stuart R. Combs, chairman, presented the following report:

The committee then discussed Resolution No. 15. This resolution was amended to read, "a qualified *non-partisan* study committee."

Mr. President, I move the adoption of this resolution, as amended.

(Motion seconded by many, put to vote, and carried.)

Mr. President, I move the adoption of this report as a whole.

(Motion seconded by many, put to vote, and carried.)

I would like to take this opportunity to thank the other members of the committee.

I also would like to request the floor once more following the report of the Reference Committee on Amendments to the Constitution and Bylaws.

THE CHAIRMAN: Because there is a conflict, there is one provision which has been referred also to the Reference Committee on Constitution and Bylaws and Dr. Combs is asking for the privilege of the floor to discuss this one further item, and the chair grants this, Dr. Combs.

LEGISLATION

The following matters were referred to the Reference Committee on Legislation. All reports will be found on the pages indicated in the September, 1963, Vol. 56, No. 9, *Journal* of the Indiana State Medical Association. Resolutions introduced before the house and referred to this committee are printed herewith.

Commission on Legislation (pages 1177-1179)

Resolution No. 5—Establishment of Medical Department within the State Board of Corrections

Resolution No. 8—Immunization of Children

Resolution No. 10—Opposition to Amendment to Food, Drug and Cosmetic Act Dealing with Proof of Efficacy

Resolution No. 11—Concerning Local Health Officers Ordering Autopsies

Resolution No. 12—Concerning Detergents
Resolution No. 14—Approval of AMA Policy on Licensure of Foreign M.D.'s

REFERENCE COMMITTEE ACTION

Dr. Truman E. Caylor, chairman, presented the following report:

Your committee first discussed the Report of the Commission on Legislation and commends in the highest terms the work of this commission during the past year. We recommend the adoption of this report as printed. Mr. President, I move the adoption of this portion of this report.

(Motion seconded by many, put to vote, and carried.)

Resolution No. 5

Introduced by: LAPORTE COUNTY MEDICAL SOCIETY

Subject: ESTABLISHMENT OF MEDICAL DEPARTMENT WITHIN THE STATE BOARD OF CORRECTIONS

WHEREAS, The State Board of Corrections of the State of Indiana has within its jurisdiction the health of an average of approximately 7,500 persons as inmates of its several correctional institutions; and

WHEREAS, The adequate medical care of these persons requires certain considerations in policy, selection of medical personnel, and procurement of medical supplies and equipment that are at variance with the usual non-medical policy, personnel, and procurement procedures generally employed; now

THEREFORE, BE IT RESOLVED, by the LaPorte County Medical Society that the medical needs of inmates of the correctional institutions of the State Board of Corrections of the State of Indiana would be better met by the establishment of a medical department under the direction of a licensed physician within the State Board of Corrections; such department having authority for the selection of personnel, procurement of medical supplies and equipment; and

BE IT FURTHER RESOLVED, that this resolution be formally transmitted to the Indiana State Medical Association for consideration by the House of Delegates at the next session.

REFERENCE COMMITTEE ACTION

Dr. Truman E. Caylor, chairman, presented the following report:

Your committee then took up Resolution No. 5. Your committee reviewed this resolution and agrees with it in principle but recommends the resolution be modified as follows:

WHEREAS, the State Board of Corrections of the State of Indiana has within its jurisdiction the health of approximately 7,500 inmates; and

WHEREAS, the operation of the medical department of these institutions has shown certain deficiencies in selection of medical personnel and procurement of medical supplies and equipment

THEREFORE, BE IT RESOLVED by the Indiana State Medical Association that the medical needs of inmates of the institutions of the State Board of Corrections of Indiana would be better met by the establishment of a medical department under the direction of a licensed physician within the State Board of Corrections; such department having authority for the selection and direction of personnel, procurement of medical supplies and equipment; and

BE IT FURTHER RESOLVED that the urgency of this matter be brought to the attention of the Governor and the Commissioner of Corrections of Indiana by the Indiana State Medical Association Commission on Governmental Services.

Mr. President, your committee recommends, therefore, the adoption of this resolution as modified. Mr. President, I move the adoption of this portion of this report.

(Motion seconded by many, put to vote, and carried.)

Resolution No. 8

Introduced by: LAKE COUNTY MEDICAL SOCIETY

Subject: IMMUNIZATION OF CHILDREN

WHEREAS, immunization against diphtheria, pertussis, tetanus, smallpox and polio, and the testing for tuberculosis are of utmost importance during the early years of life; and,

WHEREAS, there has been a great migration into Indiana from various sections of the country where little such immunization or testing is done; and,

WHEREAS, a serious public health hazard now exists in many places in Indiana because of low immunization rates,

BE IT THEREFORE RESOLVED, that the Indiana State Medical Association seek the passage of legislation requiring immunization against diphtheria, pertussis, tetanus, smallpox and polio, and the testing for tuberculosis before allowing the admission of a child to the schools in this state;

BE IT FURTHER RESOLVED, that the Indiana State Medical Association confer with the office of the State Superintendent of Schools and the Indiana State Health Commissioner in the preparation of such legislation, and in providing preservation of the right of the parents of such children to object to such immunization and testing when the objection is based on religious or similar valid reasons.

REFERENCE COMMITTEE ACTION

Dr. Truman E. Caylor, chairman, presented the following report:

Your committee then discussed Resolution No. 8 dealing with the Immunization of Children and again this committee offers an amended resolution as follows:

WHEREAS, immunization against diphtheria, pertussis, tetanus, smallpox and polio, and the

testing for tuberculosis are of the utmost importance during the early years of life; and,

WHEREAS, there has been a great migration into Indiana from various sections of the country where little such immunization or testing is done; and,

WHEREAS, a serious public health hazard now exists in many places in Indiana because of low percentage of immunization,

BE IT THEREFORE RESOLVED, that the Indiana State Medical Association seek the passage of legislation permitting School Boards to require health certificates before entering school;

BE IT FURTHER RESOLVED, that the Indiana State Medical Association confer with the office of the State Superintendent of Schools and the Indiana State Health Commissioner in the preparation of such legislation.

With this change, we recommend the adoption of this resolution as amended. Mr. President, I move the adoption of this portion of the report.

(Motion seconded by many.)

Dr. Paris asked if the committee would accept the inclusion of "measles" in this program of immunization. Discussed by Dr. Hamilton (Whitley county), Dr. Donald LaFollette (Floyd county), and Dr. Shellhouse (Lake county).

Dr. Paris' motion that the report be amended by inserting the word "measles" in the proper place in the resolution was seconded, put to a standing vote and carried, 56 to 42.

(Motion for adoption of this section of the report, as amended, was seconded, put to vote, and carried.)

Resolution No. 10

Introduced by: FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY

Subject: OPPOSITION TO AMENDMENT TO FOOD, DRUG AND COSMETIC ACT DEALING WITH PROOF OF EFFICACY

WHEREAS, the 1962 Kefauver-Harris Amendment to the Food, Drug and Cosmetic Act increases the power and scope of the Food and Drug Administration, and

WHEREAS, this agency not only rules on the toxicity or danger of drugs, but also now is empowered to rule on their efficacy, and

WHEREAS, this removes the choice of medication from the realm of the practicing physician who should be allowed to decide on efficacy, and

WHEREAS, such legislation will ultimately reduce the amount of new product research and new product development within the drug industry,

NOW, THEREFORE, BE IT RESOLVED, that the Indiana State Medical Association go on record as opposing that portion of the 1962 Amendment to the Food, Drug and Cosmetic Act dealing with proof of efficacy,

AND FURTHERMORE BE IT RESOLVED that copies of this Resolution, with explanatory materials, be sent to all the United States Senators and Representatives from the State of Indiana.

REFERENCE COMMITTEE ACTION

Dr. Truman E. Caylor, chairman, presented the following report:

Resolution No. 10: The committee reviewed this resolution and approves the resolution as printed with the exception of the last resolve. We recommend that this be amended to read as follows:

WHEREAS, the 1962 Kefauver-Harris Amendment to the Food, Drug and Cosmetic Act increases the power and scope of the Food and Drug Administration, and

WHEREAS, this agency not only rules on the toxicity or danger of drugs, but also now is empowered to rule on their efficacy, and

WHEREAS, this removes the choice of medication from the realm of the practicing physician who should be allowed to decide on efficacy, and

WHEREAS, such legislation will ultimately reduce the amount of new product research and new product development within the drug industry,

NOW, THEREFORE, BE IT RESOLVED, that the Indiana State Medical Association go on record as opposing that portion of the 1962 Amendment to the Food, Drug and Cosmetic Act dealing with proof of efficacy.

AND FURTHERMORE BE IT RESOLVED that copies of this Resolution be sent to all the United States Senators and Representatives from the State of Indiana.

With this amendment to the final resolve, your Committee recommends the adoption of this Resolution as amended. Mr. President, I move the adoption of this portion of the report.

(Motion seconded by many, put to vote, and carried.)

Resolution No. 11

Introduced by: FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY

Subject: RESOLUTION CONCERNING LOCAL HEALTH OFFICERS ORDERING AUTOPSIES

WHEREAS, the intent and interpretation of the state law presently allows the county coroner to order autopsies only when there is bona fide suspicion of homicide, suicide, or accidental death, and

WHEREAS, most unexpected deaths in Indiana do not fit this category, and

WHEREAS, it is medically and socially advisable to investigate unexpected deaths, and

WHEREAS, to place all unexpected deaths in a coroner category puts the county coroner in an untenable legal position and places the deceased person's family in an awkward moral and social position,

THEREFORE, BE IT RESOLVED, that the local county and/or city health officers be empowered to order autopsies in cases of unexpected deaths not qualifying for coroners' cases and that

the State Legislature be asked by the Indiana Medical Association to pass permissive and enabling legislation to this end.

REFERENCE COMMITTEE ACTION

Dr. Truman E. Caylor, chairman, presented the following report:

Resolution No. 11: Your committee discussed this resolution very thoroughly and recommends that this resolution not be adopted inasmuch as legislation passed by the 1963 Indiana General Assembly invalidates the major premise of this resolution. Mr. President, I move the adoption of this portion of this report.

(Motion seconded by many, put to vote, and carried.)

Resolution No. 12

Introduced by: FORT WAYNE (ALLEN COUNTY) MEDICAL SOCIETY

Subject: RESOLUTION CONCERNING DETERGENTS

WHEREAS, nearly four billion pounds of detergents were sold in the United States in 1962, and

WHEREAS, about 75% of all detergents sold contain ABS (alkyl benzene sulfonate), and

WHEREAS, ABS resists natural bacterial degradation causing pollution of Indiana's ground water and natural water, and

WHEREAS, this pollution results in

1. Unpalatable, sudsy drinking water, and
2. Increased sewage treatment cost and decreased sewage treatment efficiency, and
3. Unknown effects on health when ingested over long periods, and
4. Harm to wild life and waterlife, and
5. Menace to waterway traffic, and
6. Destruction of some of Indiana's scenic beauty, and

WHEREAS, detergents can be manufactured without ABS and with properties of high susceptibility to degradation and with little increase in cost,

THEREFORE, BE IT RESOLVED, that the Indiana State Medical Association ask the State Legislature to pass laws controlling the sale of detergents in Indiana by limiting their sudsing power and their resistance to degradation.

AND FURTHER BE IT RESOLVED, that the Indiana State Board of Health set standards for this proposed legislation.

And that copies of this resolution be sent to:

1. The Governor of Indiana
2. Appropriate committees in both Houses of the State Legislature and
3. The State Board of Health and its Secretary and
4. The Indiana State Board of Health Society Engineers and
5. The Department of H.E.W. and
6. The Rivers and Harbors Sub-Committee of the House Public Works Committee (Chairman Blatnik) and
7. The appropriate Senate Committee (Senator Neuberger).

REFERENCE COMMITTEE ACTION

Dr. Truman E. Caylor, chairman, presented the following report:

Resolution No. 12: This resolution was reviewed and discussed thoroughly by your committee and we commend the Allen County Medical Society for calling it to the attention of the delegates. We recommend, however, that the resolves of this resolution be amended to read as follows:

THEREFORE, BE IT RESOLVED THAT the Indiana State Medical Association go on record as recognizing this problem and the need for further study and therefore recommend that this resolution be referred to the Commission on Public Health of the Association; The Indiana State Board of Health; and the Department of Conservation of the State of Indiana for such study.

Your committee then recommends the adoption of this resolution as amended. Mr. President, I move the adoption of this portion of the report.

(Motion seconded by many, put to vote, and carried.)

Resolution No. 14

Introduced by: ELKHART COUNTY MEDICAL ASSOCIATION

Subject: APPROVAL OF AMA POLICY ON LICENSURE OF FOREIGN M.D.'s

Inasmuch as there is a severe physician shortage in certain localities of the United States and Indiana especially in certain specialties, and inasmuch as there are a number of highly trained, well qualified physicians in foreign countries desiring to serve the needs of the ill of this country, and inasmuch as these M.D.'s are approved by the AMA policy on approving licensure of foreign doctors through the E.C.F.M.G. exam, and inasmuch as they are now eligible for approved licensure in the state of Indiana, by the State Board of Medical Licensure only after a prolonged and delaying requirement:

BE IT RESOLVED, That the Elkhart County Medical Association go on record as approving the AMA policy on licensure of foreign M.D.'s and repeal of the state of Indiana medical licensure requirement delaying their licensure in Indiana since it is unnecessarily long in certain cases.

BE IT FURTHER RESOLVED, That we instruct our county delegates to the Indiana State Medical Association to pursue our resolution in this manner by means that seem wisest to them so that the E.C.F.M.G. and Indiana examinations together with letters of recommendation and personal interviews can be used as a means of judgment and decision on licensure in the individual case.

FURTHER, That a copy of this resolution be sent to Jene Bennett, M.D., our district councilor

and to the St. Joseph County Medical Society requesting they act in sympathy with our resolution.

REFERENCE COMMITTEE ACTION

Dr. Truman E. Caylor, chairman, presented the following report:

Resolution No. 14: Your committee recommends the rejection of this resolution inasmuch as the law of Indiana does not exclude those who meet the standards of education and residence.

Mr. President, I move the adoption of this portion of the report.

(Motion seconded by Dr. Painter, put to vote, and carried.)

Mr. President, I move the adoption of this report as a whole.

(Motion seconded by many, put to vote, and carried.)

I desire at this time to express my thanks to the other members of this committee, Dr. Otis Bowen, Dr. Bill Freeland, Dr. Richard Juergens, and Dr. Donald LaFollette.

We also certainly should express our gratitude to Dr. McGue from Michigan City who helped to bring to us the knowledge of the situation and possibly the way to correct it in the correctional institutions.

PUBLIC RELATIONS

The following matters were referred to the Reference Committee on Public Relations. All reports will be found on the pages indicated in the September, 1963, Vol. 56, No. 9, *Journal* of the Indiana State Medical Association.

Grievance Committee (page 1173)
Medical-Legal Review Committee (no written report)
Commission on Public Information (pages 1179-1180)

REFERENCE COMMITTEE ACTION

Dr. Wendell C. Stover, chairman, presented the following report:

Grievance Committee

In consideration of the report of the Grievance Committee, your reference committee wishes to commend Dr. Philip B. Reed and his committee for a job well done. Your reference committee notes that under the present plan of adjudication the number of complaints has been reduced from preceding years. The Grievance Committee is to be commended on attempting to solve any difficulty between the patient and physician at the county society level, but failing to do so, at the request of the county society the state Grievance Committee will proceed.

The Reference Committee also wishes to add our word of tribute to the late Dr. Harry R. Stimson who served this committee so faithfully as its vice chairman.

Mr. President, I move the adoption of this portion of the report.

(Motion seconded by many, put to vote, and carried.)

Medical-Legal Review

The report of the Medical-Legal Review Committee was referred to your reference committee but as there was no written report and no persons appearing for or against any matter pertaining to that field, no action was taken by your reference committee. However your reference committee feels that this is an area of increasing importance and the rapport between the medical and legal professions should be encouraged at all levels.

Mr. President, I move the adoption of this portion of the report.

(Motion seconded by many, put to vote, and carried.)

Public Information

Your reference committee notes that the Commission on Public Information has done an excellent task in alerting the county medical societies to form liaison committees with the nurses in their areas to further better socio-economic relations with particular reference to the senior citizen. Your reference committee concurs with the Public Information Commission upon their opposition to the action taken by the American Nurses Association favoring King-Anderson legislation.

Your reference committee wishes to commend the commission on its endeavor in State Fair exhibits and the complete cooperation of the Woman's Auxiliary of the Marion County Medical Society.

The commission has done well to counteract HR 3920 by "Operation Hometown" through public information at all levels.

The Medical Alert Program for identification tags for specific illnesses that are to be worn by individuals, and the final determination of the wording by the individual physician and the patient is to be commended.

The program for alerting high school students to possible medical careers is definitely advised by your reference committee to combat physician shortages.

Your reference committee concurs with continuance of participation in the Science Fairs and the Medical Assistants program.

Mr. President, I move the adoption of this portion of the report.

(Motion seconded by Dr. Rifner, discussed by Dr. Paris, put to vote, and carried.)

Mr. President, I move the adoption of the report as a whole, as corrected.

(Motion seconded by Dr. Paris, put to vote, and carried.)

I wish to thank the members of the reference committee for their participation and deliberations. This report is signed by Drs. David Dukes, Lloyd Hill, J. Robert Ball, Thomas D. Armstrong, and myself as chairman.

HYGIENE AND PUBLIC HEALTH

The following matters were referred to the Reference Committee on Hygiene and Public Health. All reports will be found on the pages indicated in the September, 1963, Vol. 56, No. 9, *Journal* of the Indiana State Medical Association with the exception of the supplementary report of the Commission on Voluntary Health Agencies, which is printed below. Resolutions introduced before the House and referred to this committee are printed herewith.

Commission on Public Health (pages 1182-1184)
Commission on Voluntary Health Agencies (pages 1184-1187), and the following supplemental report:

As noted in the fourth to the last paragraph of the regular report of this commission, Resolution 26, House of Delegates, American Medical Association, submitted by the Indiana State Medical Association, at the clinical session of the American Medical Association in November, 1962, has led to a great deal of discussion before the Committee on Voluntary Health Agencies of the American Medical Association (the Shipman Committee).

The Commission on Voluntary Health Agencies of the Indiana State Medical Association had access to the proposed report of the Shipman Committee to the Board of Trustees and took very active opposition to this report because the Shipman Committee sought to avoid putting the American Medical Association in the position of accrediting voluntary health agencies and proposed to render a report that failed in all respects to answer the demands of Resolution 26. The matter was scheduled for discussion at the AMA Institute at the Drake Hotel in Chicago, August 22-23, 1963, and on this occasion representatives of the Indiana State Medical Association Commission appeared on the program for an inadequate time but sufficient facts were presented to cause a change in the attitude of the American Medical Association in the final report of the Shipman Committee.

Prior to going to Chicago, the Indiana State Medical Association had forwarded complete background data on Resolution 26 to all of the fifty constituent state societies of the American Medical Association. This information was in front of the official representatives of the states at the Institute.

As a result of the deliberations, the Shipman Committee report was submitted to the Board of Trustees on September 6-7, 1963, and the entire report will be handed down to the House of Delegates by the Board of Trustees at the meeting of the American Medical Association in Portland. The significant change in this report is the added statement that the committee has never discouraged experimentation or pilot studies of constituent and component medical societies in state or local relationships with voluntary health agencies. In conversations with the members of the Shipman Committee, the Commission on Voluntary Health Agencies was encouraged to continue the program as presently constituted in Indiana, with the advice that it probably would be more suitable for the Indiana State Medical Association to grant recognition to those Voluntary Health Agencies meeting its standards, rather than to grant approval, or disapproval, of specific agencies. This slight change in policy will be recommended to the new commission next year.

Because of the misconception of the Shipman Committee of the real intent of Resolution 26, this commission recommends to the House of Delegates of the Indiana State Medical Association that a new resolution be drafted and submitted at the next meeting of the American Medical Association, which would ask that the American Medical Association closely review all national voluntary health agencies and act as a national accrediting body for these agencies by recognizing those that meet the standards set forth in the *Handbook for Medical Societies and Individual Physicians on National Voluntary Health Agencies* and in the new publication, *Professional Relationships with Voluntary Health Agencies* by the Committee on Voluntary Health Agencies of the American Medical Association (4100.04-647L, 563-10M) and by publishing the names of those so recognized.

Therefore, this commission submits, as a part of its report, the following resolution, and requests that this resolution be submitted by the Delegates of the American Medical Association from the Indiana State Medical Association at the next meeting of the House of Delegates of the American Medical Association.

Resolution

WHEREAS, in the United States of America a great multiplicity of voluntary health agencies has sprung up in this century who collect millions of dollars, annually, as voluntary contributions toward the improvement of the health of mankind throughout this country and the world, and;

WHEREAS, there is no central organization of any type, especially of organized medicine, that reviews the aim, practices and procedures of these agencies in view of advising our citizens of the propriety of each of these agencies, and;

WHEREAS, after five years of intensive study and experience the Indiana State Medical Association believes that organized medicine has the duty of protecting our patients and fellow citizens from questionable solicitation of funds for the improvement of health and also believes that organized medicine must assert leadership in this field because the physicians of America are held responsible in the minds of all citizens for health matters, and the Indiana State Medical Association believes that we must give informed leadership in this field or have others extend such leadership through government, or accept the chaotic situation that now exists, and;

WHEREAS, a Committee on Voluntary Health Agencies does exist in the American Medical Asso-

ciation and has begun some study in this field and has the mechanism and staff for the purposes;

NOW, THEREFORE, BE IT RESOLVED, that the House of Delegates of the American Medical Association mandate the Committee on Voluntary Health Agencies of the American Medical Association, through the Board of Trustees, to review and study all facets of the operation of the Voluntary Health Agencies operating on a national level, and to act as an accrediting agency for these agencies to the extent of granting public and published recognition on the part of the American Medical Association to those agencies fulfilling the standards set up by this Committee in previous publications, or as modified, and;

FURTHER, BE IT RESOLVED, that the Committee on Voluntary Health Agencies of the American Medical Association furnish information to the fullest extent possible to the constituent state medical societies and encourage these societies to set up recognition programs in each of their states for voluntary health agencies operating at state level.

Maternal Mortality Study report for 1962. (Copy handed to each delegate)

Resolution No. 7—Narcotic Addiction—A Medical Problem

REFERENCE COMMITTEE ACTION

Dr. Donald G. Mason, chairman, presented the following report:

Public Health

First, the report of the Commission on Public Health (pages 144 to 148 in the Handbook) was reviewed and discussed. This committee approved the report as written and wishes to commend especially the Committee on Rural Health and Physician Placement for the outstanding efforts in promoting the Junior-Senior Day at Indiana University Medical School.

Mr. President, I move the adoption of this portion of the report.

(Motion seconded by Dr. Rosenbloom, put to vote, and carried.)

Voluntary Health Agencies

Second, the report of the Commission on Voluntary Health Agencies (pages 148 to 155 in the Handbook) and the supplemental report of this commission presented at the first meeting of the House of Delegates containing a resolution were reviewed and discussion was heard from representatives of several county societies and members of the commission. We wish to commend the members of this commission for the arduous and controversial work that they are doing. The Commission on Voluntary Health Agencies reaffirms that it is not within their province or of the medical profession to detail how funds shall be raised but rather how they are to be utilized and administered for the overall public good.

Mr. President, I move the adoption of the initial and supplemental reports of the Commission on Voluntary Health Agencies including the resolution.

(Motion seconded by Dr. Nelson, put to vote, and carried.)

Maternal Mortality Study

Third, the work and report of the Maternal Mortality Study Committee was reviewed and commended highly.

Mr. President, I move the adoption of this portion of the report.

(Motion seconded by many, put to vote, and carried.)

Resolution No. 7

Introduced by: LAKE COUNTY MEDICAL SOCIETY

Subject: NARCOTIC ADDICTION—A MEDICAL PROBLEM

WHEREAS, the problem of narcotic addiction is annually becoming more widespread, involving not only human derelicts and degenerates in search of oblivion, but also teenagers seeking thrills and who are willing to listen to a pusher who has an economic interest in procuring victims; and,

WHEREAS, the present policy of the Bureau of Narcotics in treating narcotic addiction as a criminal rather than a medical problem has produced notoriously poor results, in that it has furnished organized crime a huge captive market for the sale of narcotics at fantastic prices, and has established for this most unsavory segment of society a profit motive for the dissemination of narcotics to anyone who can be induced to succumb to their use; and

WHEREAS, narcotic addiction is clearly an illness and as such is properly within the province and responsibility of the medical profession for management and treatment in the individual and for study and research of the disease in general; and,

WHEREAS, a changing attitude in regard to narcotic addiction has been recently apparent in statements from the American Medical Association and from certain federal health agencies;

NOW, THEREFORE, BE IT RESOLVED, by the Indiana State Medical Association as follows:

1. That the Indiana State Medical Association shall convey to the American Medical Association and to all Indiana representatives and senators in Congress its concern about the growing problem of narcotic addiction and its firm conviction that progress toward the control of this problem will come only upon its recognition as a medical problem and the removal of a profit incentive from the distribution of narcotics.

2. That this association offers its full support and co-operation to the American Medical Association and other health agencies in the study of this problem, with a view to the revision of existing laws and administrative rules and attitudes.

3. That the individual members of this association are encouraged to lend their support to the

study and solution of this problem by exerting their influence as doctors and citizens in their local communities.

REFERENCE COMMITTEE ACTION

Dr. Donald G. Mason, chairman, presented the following report:

Fourth, the resolution by the Lake County Medical Society concerning Narcotic Addiction—A Medical Problem was discussed. It was felt by the reference committee that this resolution points out a socio-medical problem which has received too little attention from organized medicine.

Mr. President, we move the adoption of this resolution as written.

(Motion seconded by Dr. Fred Smith (Owen-Monroe), put to vote, and carried.)

Mr. President, I move the adoption of this report as a whole.

(Motion seconded by Dr. Glen Ward Lee, put to vote, and carried.)

In conclusion I wish to thank the members of the association who appeared before our reference committee and also the members of the reference committee who served with me—Drs. Rosenbloom, Joe Ferrara, Petry, and Harry Baxter.

AMENDMENTS TO CONSTITUTION AND BYLAWS

The following matters were referred to the Reference Committee on Amendments to Constitution and Bylaws. All reports will be found on the pages indicated in the September, 1963, Vol. 56, No. 9, *Journal* of the Indiana State Medical Association with the exception of the supplemental report of the Committee on Student Loan, which is printed below. Resolutions introduced before the House and referred to this committee are printed herewith.

Commission on Constitution and Bylaws. (pages 1175-1176)

Resolution No. 4—Realignment of Dues Structure

Resolution No. 6—Adequate Consideration of Reference Committee Reports

Resolution No. 9—The Responsibility of Medicine with Allied Health Professions and Services

Supplemental report of Student Loan Committee, presented by Dr. Lester D. Bibler, chairman:

Since the preparation of our report, your committee has continued its study of the Student Loan program as now in operation, together with a proposal which has been made for the conduct of the Student Loan program of the association by the Indiana National Bank. Your committee therefore wishes to present a resolution as follows:

WHEREAS, the Indiana State Medical Association is desirous of assisting as many worthy students as possible to obtain a medical education, and

WHEREAS, the Indiana National Bank of Indianapolis and its component banks throughout the state have offered a program which will extend the available dollars twelve and one-half times those supplied by the association, and

WHEREAS, the association would still accept the applications to the association for loans to medical students, and

WHEREAS, the banks of Indiana will in turn loan twelve and one-half dollars for every dollar placed in escrow by the association, and

WHEREAS, these funds would be loaned under the Rules and Regulations of the association and only to medical students, and

WHEREAS, the bank would take on the responsibility of collection of these accounts; NOW THEREFORE

BE IT RESOLVED, that the House of Delegates authorize a portion of the $10.00 being currently given to AMA-ERF to be diverted for the purpose of building up a guaranteed loan fund for the benefit of medical students.

In explanation of the above resolution, the banks of Indiana are willing to establish a loan fund under the direction of the Student Loan Committee and under the rules established by our association whereby for every dollar we put in as a guarantee of the loan, they will in turn loan $12.50. If we had our entire $40,000.00 which has been authorized by this house for loans, in this guaranteed loan fund, it would mean that instead of being able to loan only $40,000.00, this arrangement would permit up to $500,000.00 in loans to students. We believe that this would be a good arrangement which would enable us to expand our loan activities at no additional cost to the association and would allow banks who are accustomed to making loans and collecting such loans, to do all the book work, rather than our association.

Resolution No. 4

Introduced by: DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY

Subject: REALIGNMENT OF DUES STRUCTURE

WHEREAS, Indiana State Medical Association has for the past twelve years supported a program of assistance to Indiana University School of Medicine through the National Fund for Medical Education and/or the American Medical Education Fund, and

WHEREAS, the approximate amount for the past few years has remained static (about $35,000. annually) because it is a compulsory portion ($10.00) of our dues structure, and

WHEREAS, the basis of this grant was intended to be judged upon the need, and

WHEREAS, funds from other sources, particularly the Federal Government, are increasingly available and administratively acceptable to the medical school, and

WHEREAS, Indiana State Medical Association has a Student Loan program which can be made much more effective if sufficient funds were made available, now

THEREFORE BE IT RESOLVED, that that

amount of our dues structure which is now used to provide funds for American Medical Education Fund through compulsion, be retained in our dues structure but be used to provide necessary funds for an adequate Student Loan program as well as support for the general fund instead of being donated to American Medical Education Fund. That all contributions to American Medical Education Fund be on a voluntary basis and in addition to and outside of the dues structure.

REFERENCE COMMITTEE ACTION

Dr. Guy A. Owsley, chairman, presented the following report:

First considered was Resolution No. 4, and the committee recommends that the third and fourth Whereas clauses be deleted and that the resolution be modified to read as follows:

"THEREFORE BE IT RESOLVED, that that amount of our dues structure which is now used to provide funds for the American Medical Education Fund be retained in our dues structure but be used to provide necessary funds for a more adequate Student Loan program, using half the original amount already designated as medical educational funds for the Student Loan program and retaining half for AMA-ERF. The allocation of such funds for this purpose shall be reviewed annually by the Executive Committee of the Indiana State Medical Association in conjunction with the Student Loan Committee.

"BE IT FURTHER resolved that the provisions of this resolution shall apply to 1963 dues and thereafter."

Mr. President, I move that this portion of the report be approved.

(Motion seconded by many, and passed on roll call vote, 106 to 2.)

Student Loan

The committee next considered the supplemental report of the Student Loan Committee because of its relation to Resolution No. 4. The committee recommends that the second Whereas clause be amended by inserting the words, "and correspondent" after the word "component" and before the word "banks" and that it be modified by adding the following resolution:

"BE IT FURTHER RESOLVED that funds now in the existing Student Loan Fund on hand or which may hereafter be repaid shall be used for the purpose of building up said guaranteed loan fund for the benefit of medical students."

Mr. President, I move that this portion of the report be approved.

(Motion seconded by Dr. Olson, put to vote, and carried.)

Resolution No. 6

Introduced by: CARROLL COUNTY MEDICAL SOCIETY

Subject: ADEQUATE CONSIDERATION OF REFERENCE COMMITTEE REPORTS

WHEREAS, The present procedure of presenting reports of reference committees and then voting on these reports at the same meeting allows insufficient time for studying these reports by the delegates;

AND WHEREAS, This procedure has in the past resulted in the passing of resolutions which, after due consideration, were considered undesirable;

AND WHEREAS, Many important decisions, which will require careful consideration, will be taken up by the House of Delegates of the Indiana State Medical Association in the near future;

NOW, THEREFORE, BE IT RESOLVED, That the second meeting of the House of Delegates be called for the sole purpose of presenting the reports of the reference committees and discussion of the reports; and that a third meeting of the House of Delegates be called for the sole purpose of casting and recording votes, as well as for the election of officers. No discussion will be presented at this third meeting, in order to conserve time and expedite the balloting.

AND BE IT FURTHER RESOLVED, That this Resolution be forwarded to the Headquarters Office of the ISMA for presentation to the Annual Meeting of the House of Delegates in October, 1963, and to be published in the *Journal* of the ISMA in the usual manner.

REFERENCE COMMITTEE ACTION

Dr. Guy A. Owsley, chairman, presented the following report:

Resolution No. 6. Your committee recommends that this resolution be approved except that it be modified by rewording the last paragraph, which is the resolve portion thereof, to read as follows:

"NOW THEREFORE BE IT RESOLVED that the first meeting of the House of Delegates be held according to Chapter IV, Section 1, of the Bylaws and that reference committee meetings be held on the following day so that the entire membership may have an opportunity to testify, and that the reports of the reference committees be available to the delegates at least twenty-four hours before the meeting at which they are voted upon."

Mr. President I move that this portion of the report be approved.

(Motion seconded by Dr. Paris, put to vote, and carried.)

Resolution No. 9

Introduced by: GRIEVANCE COMMITTEE OF THE INDIANA STATE MEDICAL ASSOCIATION

Subject: THE RESPONSIBILITY OF MEDICINE WITH ALLIED HEALTH PROFESSIONS AND SERVICES

WHEREAS, an increasing number of persons are engaged in the overall health effort for which the medical profession holds the coordinating responsibility

AND WHEREAS, these persons represent a diversity of professions and services whose rela-

tionships to medicine are covered in the McKeown Report adopted by the American Medical Association House of Delegates June 16, 1960

AND WHEREAS, the basic tenet of the McKeown Report states that regulations "relating to services which involve the diagnosis or treatment of nervous, mental or physical illnesses or disorders of individual patients should require such services to be performed under the direct supervision or in genuine collaboration with a qualified physician,"

WHEREAS it is essential in the overall health effort that all persons so engaged coordinate their contribution through close cooperation with the medical profession on matters involving the practice of medicine*

AND WHEREAS all groups engaged in the health field can best insure the safety and effectiveness of their programs by seeking counsel and maintaining the approval of each county medical society where their programs operate in fields involving the practice of medicine

THEREFORE BE IT RESOLVED that any member of the Indiana State Medical Association who voluntarily professionally cooperates with or professionally associates with any person or group, in performing services which involve the diagnosis or treatment of nervous, mental, or physical illnesses or disorders of individual patients, which services are not performed under the direct supervision or in genuine collaboration with a physician licensed to practice the healing arts, shall be subject to citation to the Grievance Committee of his county medical society for action under its rules and procedure.

BE IT FURTHER RESOLVED that any disciplinary action taken by the Grievance Committee of the county medical society in such a matter is to be confidentially reported to the Grievance Committee of the Indiana State Medical Association.

* *Medical Practice Act*—(Approved February 28, 1945).

DEFINITION OF LAW "*Sec. 8.* To open an office for such purpose or to announce to the public in any way, a readiness to practice medicine in any county of the State or to prescribe for, or to give surgical assistance to, or to heal, cure or relieve, or to attempt to heal, cure or relieve those suffering from injury or deformity, or disease of mind or body, or to advertise, or to announce to the public in any manner a readiness or ability to heal, cure or relieve those who may be suffering from injury or deformity, or disease of mind or body, shall be to engage in the practice of medicine within the meaning of this act."

REFERENCE COMMITTEE ACTION

Dr. Guy A. Owsley, chairman, presented the following report:

Resolution No. 9. Your committee recommends approval of this resolution with the first Resolve paragraph being reworded as follows:

"THEREFORE BE IT RESOLVED that any member of the Indiana State Medical Association who voluntarily professionally cooperates with or professionally associates with any person or group not under the direct supervision or in genuine collaboration with a physician licensed to practice the healing arts in performing services which involve the diagnosis or treatment of nervous, mental, or physical illnesses or disorders of individual patients, shall be subject to citation to the Grievance Committee of his county medical society for action under its rules and procedure."

Mr. President, I move that this portion of the report be approved.

(Motion seconded by Dr. Painter, put to vote, and carried.)

Report of Commission on Constitution and Bylaws

Dr. Owsley, chairman, continued with the report of the Reference Committee on Amendments to Constitution and Bylaws:

The reference committee has considered the proposed twelve amendments to the Constitution and now presents the same as printed in the Handbook, pages 129 through 132, but because of the provisions of the Constitution relating to amendments the same cannot be voted on at this meeting.

Mr. President, I move that this portion of the report be approved.

(Motion seconded by Dr. Shellhouse, put to vote, and carried.)

Dr. Owsley, chairman, continued with the report of the Reference Committee on Amendments to Constitution and Bylaws:

Your committee next considered the proposed amendments to the Bylaws. The first amendment begins on page 132 of the Handbook and is as follows:

"BE IT RESOLVED that Section 5 of Chapter VI of the Bylaws be amended as follows: immediately following the word 'imposed' the words 'may be allowed by the Council' shall be deleted and substituted in lieu thereof the following: 'shall be allowed for in the budget.'"

The second amendment to the Bylaws reads as follows and is on page 133 of the Handbook:

"BE IT RESOLVED that Section 4, Chapter XXVI of the Bylaws be amended as follows: near the end of the first sentence immediately following the words 'shall be' and before the word 'membership,' the words 'entitled to' shall be deleted and substituted in lieu thereof shall be the words 'eligible for.'"

The third proposed amendment is as follows and is printed on page 133 of the Handbook:

"BE IT RESOLVED that Section 12, Chapter XXVI, third paragraph, of the Bylaws of the Indiana State Medical Association be amended as follows: in the last sentence immediately following the word 'pay' the following words shall be deleted, '$10.00 a year annual dues' and substituted in lieu

thereof shall be the words 'fifty percent of the annual dues.' "

The committee recommends that this resolution be modified to read as follows:

"BE IT RESOLVED that Section 12, Chapter XXVI, third paragraph, of the Bylaws of the Indiana State Medical Association be amended as follows: in the last sentence immediately following the word 'pay' the following word shall be deleted, '$10.00', and in lieu thereof the word '$15.00' shall be inserted."

The purpose of this amendment as modified is to conform this section of the Bylaws to the existing practice.

Mr. President, I move the adoption of this amendment to Section 12, Chapter XXVI, of the Bylaws, and all of the changes to the Bylaws.

(Motion seconded by Dr. Larson. As ruled by the legal counsel, one roll call vote was taken covering the above three amendments to the Bylaws, and the motion was passed unanimously.)

Mr. President, I move the adoption of this report as a whole.

(Motion seconded by Dr. Truman Caylor, put to vote, and carried.)

I would like to thank all the witnesses who appeared before the committee—they were very helpful—and also the members of the committee, M. C. Topping, Kenneth Olson, Paul Crimm, and Karl Ruddell.

Additional Report of Reference Committee on Medical Education and Hospitals

Dr. Stuart R. Combs, chairman, read from the report of the Committee on Student Loan:

Interest on loans begins on completion of internship. From time to time the House of Delegates has changed the interest rate. Loans granted prior to October 15, 1958, bore interest of 3½%; starting October 15, 1958, the rate was increased to 6%. In October, 1960, the House of Delegates authorized a 2% interest rate. In this regard, the Committee on Student Loan offers the following resolution, which was approved by the Council at its meeting on April 28, 1963:

WHEREAS, at present a student loan is without interest until: (a) withdrawal from medical school, (b) withdrawal from hospital internship, or (c) the completion of internship, and thereafter, including those notes past due, bears only 2% interest per annum, and

WHEREAS, the very low interest rate after maturity has acted as a deterrent or obstacle to collection and thereby has deprived the fund of moneys to lend to other medical students in need, and

WHEREAS, this committee believes that it would facilitate collecting said notes at maturity if the interest rate after maturity be increased, as an incentive to the borrower to make payment and thereby keep the fund revolving,

IT IS THEREFORE recommended that said loans mature:

(a) One (1) month after ceasing to be an enrolled medical student, or

(b) One (1) month after withdrawal from hospital internship, or

(c) Twelve (12) months after completion of internship.

That they bear 4 percent simple interest per annum for one (1) year after maturity and 6 percent simple interest thereafter until paid, with attorney fees in the event suit becomes necessary to compel collection.

REFERENCE COMMITTEE ACTION

Mr. President, I move the rejection of the part of the Report of the Student Loan Committee pertaining to interest rates on student loans.

(Motion seconded by Dr. Stouder.)

Discussed by Drs. Paris, Owsley and Combs.

(Motion put to vote, and carried.)

INSURANCE

The following matters were referred to the Reference Committee on Insurance. All reports will be found on the pages indicated in the September, 1963, Vol. 56, No. 9, *Journal* of the Indiana State Medical Association, with the exception of two supplemental reports of the Commission on Medical Economics and Insurance, which are printed below. Resolutions introduced before the house and referred to this committee are printed herewith.

Commission on Medical Economics and Insurance (pages 1187-1189), and the following two supplemental reports, presented by Dr. Edward T. Edwards, chairman:

(1) Topic: Survey of Utilization Committee Activity in Indiana Hospital Medical Staffs, September 1963.

Method: Ten questions were asked of Blue Shield's Physician Advisory Council representing each of 107 Indiana Hospital Medical Staffs.

Findings: Fifty-seven questionnaires were returned with answers (53%). For purposes of this study, it is assumed that those not returned represented hospitals not having utilization function performed. Eighteen hospitals' medical staffs have a utilization study with eight named "Util. Com.", five using Med. Records Com. and two using "Patterns of Patient Care" method only. This represents 31% of hospitals responding, or 14% of all Indiana hospitals.

There were seven hospitals with utilization studies in the offing which, if adopted, would increase the above to 50% of those surveyed, or 20% of the total. One hospital discontinued Util. Com. function in 1962.

Length of stay was studied by 12 and diagnostic admissions by 11.

Monthly intervals was used by nine and two reviewed findings quarterly.

Five hospitals in the State used "Patterns of Patient Care" method.

The number of physicians on Util. Com. varied from two to nine.

Five hospitals thought length of stay was reduced and three reported no change.

Utilization Studies were equally divided between large towns and small:

Large—East Chicago, St. Catherine's Hosp.; Elkhart General; Indianapolis Community, Methodist, St. Vincent's; Michigan City, St. Anthony; Richmond, Reid Memorial.

Small—Auburn, Batesville, Corydon, Kokomo St. Joseph, Monticello, Princeton, Vincennes.

Blue Shield Physician Board members live in seven towns having Util. Studies, but eight board members' towns have none.

Med. Ec. and Ins. Commission members live in four towns having such committees, but eight home towns have none.

Comment:

If the House of Delegates continues to approve the principles of utilization study of hospital practice in the interest of providing the most economic usage of the medical facility and the accompanying increased effectiveness of Voluntary Health Insurance, further efforts must be made to extend the number of medical staffs performing such function.

This could possibly be enhanced by the Commission on Medical Economics working in closer liaison with the Professional Relations Committee of the Blue Shield Board of Directors to develop educational programs in the various Councilor Districts of ISMA for hospital staff officers and medical records committee chairmen.

(2) SUPPLEMENTAL REPORT from Ad Hoc Committee for Transfer of Radiology and Pathology from Blue Cross to Blue Shield.

A second meeting was held at the ISMA Headquarters office with representatives of Indiana Hospital Assn. on 18 September '63. Ad Hoc guests included Wemple Dodds, M. D. (pathologist, Crawfordsville, who was a conferee at the origin of Blue Cross in Indiana) and R. V. Everly, M.D., member of ISMA Executive Committee.

Between the first meeting (10 March 1963) and the second, many county medical societies had submitted resolutions to their local hospital boards urging the transfer of all professional services (those requiring physician payment) to Blue Shield. This local action has been of tremendous help to the Ad Hoc Committee in making IHA representatives understand the concern of the practicing physicians in Indiana with this problem. To date, no hospital board has acted; most have stated that they would be guided by IHA decision at the state level.

Hospital Administrators' reactions to the proposal fall into two groups:

1) "The Reason-ables" who would accept the change providing certain safeguards are provided.

2) "The Deny-ables" who want to preserve status quo; who deny that there is any relationship between a Blue Cross contract including X-Ray and pathology payments and the King-Anderson type legislation which does the same; who deny that there was an understanding by the parties establishing Indiana Blue Cross that when Blue Shield was solvent the transfer would occur.

"The Reason-ables" want the following assurances from ISMA and Blue Shield before approving the change in their hospital billing which will effect the transfer of X. & L. to Blue Shield:

1) Guarantee the present full service benefits for x-ray, lab, and physical medicine of In-Hospital patients would be continued. This was agreed to in 1959 by Dr. Buchannan's committee and reiterated by the present committee.

2) Simplified billing to be continued rather than individual patient claims for each cbc, blood sugar, chest x-ray, etc. This is the only practical way to handle the bookkeeping and is approved by the Ad Hoc Committee. All x-ray charges for example would be collected during a stated period of time and submitted by the hospital as is now done with the exception that the bill would be sent to B. S. One check for that bill would be returned, endorsed to the hospital and the chief of radiology dept. jointly.

3) There should be no increased cost to the patient, no loss of Blue members covered.

4) Quality of out-of-hospital services in these fields of practice should be elevated for the protection of the public and Blue members.

5) The present basic Blue Cross contract benefits should be preserved by inclusion of X & L riders from Blue Shield to always provide basic In-Hospital diagnostic services. This is done in similar situations in Michigan and Pa. Blues now and is no problem; since BX is the only sales agent, it is simple to enforce.

6) This change does not disturb present contracts between the specialist and his hospital.

It is necessary that the 1963 House of Delegates approve the above six considerations if the Ad Hoc Committee is to achieve IHA cooperation in the transfer of these benefits to Blue Shield.

Report of Glen V. Ryan, M.D., president of Blue Shield.

Resolution No. 2—Dental Benefits and Representation Offered by Blue Shield

Resolution No. 3—Resolution Encouraging County Medical Society's Insurance Committee to Perform Review Function for Insurance Plans

REFERENCE COMMITTEE ACTION

Dr. Floyd A. Boyer, chairman, presented the following report:

The report of Dr. Ryan about the progress of the Indiana Blue Shield was received with enthusi-

asm, and the Committee was quite pleased with the constant growth of the organization, and wishes to thank Dr. Ryan for his excellent report.

Medical Economics and Insurance

The reference committee wishes to commend the commission for the fine work which was obviously undertaken so successfully during the previous year. It is hoped that the projects which were left incomplete will be objects of continuing attention. It was decided by the committee that the development of an Impartial Medical Witness Program be undertaken and the mechanics of said development be referred to the appropriate commission.

Mr. President, I move the adoption of this section of the report.

(Motion seconded by many, put to vote, and carried.)

Resolution No. 2

Introduced by: COMMISSION ON MEDICAL ECONOMICS AND INSURANCE

Subject: DENTAL BENEFITS AND REPRESENTATION OFFERED BY BLUE SHIELD

WHEREAS, Dental Services composed a significant portion of Indiana's Total Health Care Bill in 1962 being $56,000,000 as compared to $154,000,000 for Hospital Services and $143,000,000 for all Physicians' Services, and

WHEREAS, the American Dental Association and its various state components have shown interest in prepayment of dental services, and

WHEREAS, Blue Shield has the organization and operating experience which would be valuable to a dental plan, and

WHEREAS, a dental plan would contribute increased business volume, contributing to greater operating efficiency with resultant benefits to both medical and dental patient-members, and

WHEREAS, professional dental opinions would be necessary in the conduct of a Dental Benefit Plan, and

WHEREAS, it is desirable to have all professional services included in Blue Shield;

NOW THEREFORE, BE IT RESOLVED, That Indiana State Medical Association House of Delegates instruct those physicians who are board members of Blue Shield to act favorably on the inclusion of Dental Services under Blue Shield if the Indiana Dental Association should so desire;

BE IT FURTHER RESOLVED, that appropriate Indiana Dental Association representation upon the Blue Shield Board of Directors be approved, in the event that dental services benefits are offered by Blue Shield.

REFERENCE COMMITTEE ACTION

Dr. Floyd A. Boyer, chairman, presented the following report:

Resolution No. 2. Dental Benefits and Representation offered by Blue Shield. The committee feels that a resolution of this nature would best be instigated by the Indiana State Dental Association. However, the proposal was viewed in the nature of "enabling legislation" on the part of the commission and as such it was endorsed by the committee.

Mr. President, I move the adoption of this section of the report.

(Motion duly seconded, put to vote, and carried.)

Resolution No. 3

Introduced by: COMMISSION ON MEDICAL ECONOMICS AND INSURANCE

Subject: RESOLUTION ENCOURAGING COUNTY MEDICAL SOCIETY'S INSURANCE COMMITTEE TO PERFORM REVIEW FUNCTION FOR INSURANCE PLANS

WHEREAS, there is an occasional need for a physician's analysis of insurance claims to determine if the clinical situation meets the contractural terms of the insurance coverage; and

WHEREAS, the present Blue Cross Physician's Advisory Committee is composed of five doctors representing the clinical fields of Pathology, Radiology, Psychiatry, General Surgery and General Practice; and

WHEREAS, specialization by physicians frequently results in esoteric situations beyond the ken of the average physician; and

WHEREAS, county medical societies conduct local review committees for Blue Shield; and

WHEREAS, there exist local variances in medical facilities and patterns of clinical practice, NOW, THEREFORE,

BE IT RESOLVED: That the Indiana State Medical Association House of Delegates encourage county medical societies to offer this service of clinical review of questioned claims to the insurance industry;

BE IT FURTHER RESOLVED: That the industry then be advised that such service is available on an individual county basis.

REFERENCE COMMITTEE ACTION

Dr. Floyd A. Boyer, chairman, presented the following report:

Resolution No. 3. Resolution encouraging county medical society's insurance committee to perform Review Function for Insurance Plans. The committee after much discussion decided that the principles involved in the proposal are much to be desired and therefore recommend the adoption of this resolution.

Mr. President, I move the adoption of this section of the report.

(Motion seconded by many, put to vote, and carried.)

Dr. Boyer, chairman, continued with the report of the Reference Committee on Insurance:

The next item reviewed by the committee was the section of the commission report dealing with

the Ad Hoc Committee for the transfer of Radiology and Pathology from Blue Cross to Blue Shield and the supplemental report of this committee.

After hearing from many individuals during an open discussion of this item the committee wishes to thank all who gave their opinions and ideas so freely. The committee feels that this transfer is one which has been greatly anticipated for some years in the medical profession. There seem to be only minimal problems involved in the accomplishment of this transfer, and the committee recommends wholeheartedly the approval of the six considerations of the Ad Hoc Committee in the supplemental report.

Mr. President, I move the adoption of this section of the report.

(Motion seconded by many, put to vote, and carried.)

The Reference Committee wishes to thank all who took the time and trouble to appear and offer their views on the items discussed. The many comments and discussions were of great value in formulating the final opinions as presented. The chairman also wishes to thank the members of the reference committee for their participation.

Mr. President, I move the adoption of this report as a whole.

(Motion seconded, put to vote, and carried.)

The committee consisted of Drs. Wemple Dodds, Case Hammond, Peter Petrich, John Beeler and myself as chairman.

MISCELLANEOUS BUSINESS

The following matters were referred to the Reference Committee on Miscellaneous Business. All reports will be found on the pages indicated in the September, 1963, Vol. 56, No. 9, *Journal* of the Indiana State Medical Association, with the exception of the supplemental report of the Building Committee which is printed below. Resolutions introduced before the House and referred to this committee are printed herewith.

Commission on Convention Arrangements (no printed report)

Commission on Governmental Medical Services (pages 1180-1182)

Commission on Inter-Professional Relations (page 1190)

Commission on Aging (pages 1191-1192)

Building Committee. (Copy of report to Council handed to each delegate).

Dr. Ralph V. Everly, chairman, presented the following report:

We are very pleased with our new headquarters. I am very happy to say that the headquarters personnel—Mr. Waggener and the two field men—attacked the job of tiling the floor and painting the walls in the basement for a matter of $600.00, and a saving of many dollars to us. I certainly thank the headquarters staff for that saving. They did a professional job, and we would like for every one of you, while you're here, if you have a few minutes, to drop by 3935 North Meridian and walk through and see what the place looks like after a year of occupancy.

Resolution No. 13—Recognition of Sergeant Paul

REFERENCE COMMITTEE ACTION

Dr. Guy B. Ingwell, chairman, presented the following report:

Convention Arrangements

The reference committee met, as scheduled, and discussed the program, as outlined in the Handbook for this annual meeting. The committee reviewed the program thoroughly and the exhibits and wishes to commend the commission for arranging an excellent program. Your committee feels the addition of color T.V. is a feature well worth every physician's time in viewing these presentations. Your reference committee also wishes to recommend to this house the appreciation of the association by expressing to Smith, Kline and French our appreciation for their cooperation in making these color T.V. presentations possible.

In reviewing the exhibits, we believe that the scientific exhibits are of unusual excellence this year, as well as the quality of the technical exhibits, and we would urge every member of this house to visit the exhibit section.

Mr. President, I move the adoption of this portion of this report.

(Motion seconded by many, put to vote, and carried.)

Governmental Medical Services

Your committee next discussed the report of the Commission on Governmental Medical Services. We reviewed this report and studied its contents carefully and recommend the acceptance of the report as written. Dr. Charles Alvey, chairman of the commission, was present to discuss this report and answered several questions to the satisfaction of our committee. He also informed us of the proposed Regional Meetings on Mental Health which will begin on October 23 and the committee recommends that the delegates, upon return to their component societies, urge their societies to urge medical representation at these regional meetings.

Mr. President, I move the adoption of this portion of our report.

(Motion seconded by many, put to vote, and carried.)

Inter-Professional Relations

The next matter considered was the report of the Commission on Inter-Professional Relations. We commend the committee for the progress which they have made and commend them for their plans for the coming year. The report was studied in its entirety and we recommend the acceptance and adoption of this report as printed.

Mr. President, I move the adoption of this portion of our report.

(Motion seconded, put to vote, and carried.)

Commission on Aging

We next considered the report of the Commission on Aging. The committee studied this report and recommends that it be adopted as printed and that the commission be commended for the fine work it is accomplishing in the field of aging.

Mr. President, I move the adoption of this portion of the report.

(Motion seconded, put to vote, and carried.)

Building Committee Report

We next discussed the Building Committee report, but inasmuch as no written report had been presented before the house, the committee did discuss in detail with Dr. Ralph Everly, the chairman of the Building Committee, the activities of his committee. We recommended to Dr. Everly that the report which was previously presented before the Council be distributed to the House of Delegates at its second meeting. This, we believe, has been done. Your reference committee feels that there are many facts in this report that should be mentioned and we urge every delegate to read this report before his county society. The report which was originally presented to the Council in April was for an eleven months' operation and on this short notice it was impossible to bring this up to date for a full year; however, we are of the opinion that the eleven month report is indicative of the advisability of the Association having its own building.

It was noted in this report that the total cost of operating the building for the first eleven months, which included fuel, air conditioning, electrical energy, water, burglary protection, janitorial services, maintenance and supplies totaled $9,216.77. The committee report breaks this down to show that this makes a monthly operation cost of $837.88. In computing this on a square foot cost of the building, we find total cost of operating the building comes to .784¢ per square foot per year, or .0713¢ per square foot per month.

The committee further shows that had the Association rented the same amount of space in the Hume Mansur Building, the rental space for the same eleven months would have amounted to $32,315.25 and had the association leased equivalent space in a more modern air conditioned building, the rent based on the figure quoted to the association would have amounted to $48,472.93 for the same period of time.

Another analysis which the committee made in their report shows that before, when the committees were meeting at the university and in the hotels, the average food cost was running $2.75 per person. The report shows that during this period of time 476 members of committees and commissions were fed in the building at a total cost of $553.24, which averages $1.16 per person. Therefore, the building has, in addition, saved the association $745.76 in food costs during this eleven month period. In addition to the convenience of the members having easy access to comfortable and pleasant meeting facilities, it has, according to the Building Committee and to many of the officers, afforded the association a more efficient and effective operation of our committees and commissions.

The committee is of the opinion that if the delegates will make these facts known to the members of their local societies, the physicians who have not seen fit to contribute as yet or to make a loan toward this building might be encouraged to do so, thereby eliminating the indebtedness on the building and the interest which we are paying which could be used for other activities of our association. We believe the committee has shown that for the amount of space used, the construction and occupancy of our own building has been a prudent one.

Mr. President, I move the adoption of this section of this report.

(Motion seconded, put to vote, and carried.)

Resolution No. 13

Introduced by: ELKHART COUNTY MEDICAL ASSOCIATION

Subject: RECOGNITION OF SERGEANT PAUL

WHEREAS, injury from auto crashes is a major medical problem, and

WHEREAS, Sergeant Elmer Paul, while a member of the Indiana State Police, originated and developed the first formal Auto Crash Injury Research Program to find ways to solve this problem, and

WHEREAS, this research demonstrated the safety value of such devices as the safety door catch and the seat belt together with many other innovations, and

WHEREAS, his research stimulated the subsequent Cornell Crash Injury Research Program followed by the highly successful and cooperative educational program for auto safety by the American Medical Association, the National Safety Council and the Public Health Service, and

WHEREAS, his original work has indebted untold numbers of persons whose injuries were lessened or whose lives were saved,

NOW BE IT RESOLVED, that the Indiana State Medical Association bestow its official recognition of, and commendation to, Sergeant Paul as the originator of Auto Crash Injury Research, and

BE IT FURTHER RESOLVED, that a copy of this resolution be presented by our AMA delegates to the next House of Delegates meeting of the AMA for its consideration for similar recognition.

REFERENCE COMMITTEE ACTION

Dr. Guy B. Ingwell, chairman, presented the following report:

The committee next considered Resolution No. 13 from the Elkhart Medical Association on the recognition of Sergeant Paul. This resolution was ap-

proved by the committee as written, and Mr. President, I move the adoption of this section of the report.

(Motion seconded, put to vote, and carried.)

Mr. President, I move the adoption of the report as a whole.

(Motion seconded by many, put to vote, and carried.)

I would like to at this time express my appreciation to the other members of the committee for the time they devoted in listening to witnesses and to their study on these matters. The members of the committee were: S. E. Bechtold, South Bend; Frank Green, Rushville; James Leffel, Indianapolis; Richard Wagner, Huntington.

Introduction of Resolution No. 16

On motion of Dr. William Shaffer, duly seconded, on standing vote the House suspended the rules and Dr. Shaffer presented the following resolution:

Resolution No. 16

Introduced by: ROBERT ACHER, M.D., ALTERNATE DELEGATE, DECATUR COUNTY

Subject: PROPOSAL FOR A RESOLUTION ON CIGARETTE SMOKING

WHEREAS, the apparent correlation between the occurrence of pulmonary neoplasms, cardiovascular and pulmonary disease, and cigarette smoking is of great concern to the medical profession in Indiana; and

WHEREAS, there is serious obligation for the medical profession to alert the public to all health hazards—real and potential; and

WHEREAS, the physician has cause and opportunity to effect change in attitudes and habits regarding health and to contribute to individual and public knowledge;

NOW, THEREFORE, BE IT RESOLVED: The Indiana State Medical Association recommends that Indiana physicians overlook no opportunity to advise and counsel lay individuals regarding the dangers of prolonged cigarette smoking, especially the youth of this state to avoid the habit.

This resolution was referred to the Reference Committee on Hygiene and Public Health.

Supplemental Report of Reference Committee on Hygiene and Public Health

Dr. Donald G. Mason, chairman, presented the following report:

The Reference Committee on Public Health met in emergency session a few minutes ago to consider Resolution No. 16—Proposal for a Resolution on Cigarette Smoking. In view of the fact that this is a controversial issue, the Reference Committee unanimously agrees that this resolution be referred to the Commission on Public Health for further study and recommendation.

Mr. President, I move the adoption of this report.

(Motion seconded, discussed by Dr. Jack Shields, put to vote, and carried.)

ELECTION OF OFFICERS

The following officers were elected:

President-elect—Joe M. Black, M.D., Seymour

Treasurer—Irvin W. Wilkens, M.D., Indianapolis

Assistant Treasurer—Ottis N. Olvey, M.D., Indianapolis

AMA delegates and alternates for term expiring December 31, 1965:

Delegates: Guy A. Owsley, M.D., Hartford City
Jack E. Shields, M.D., Brownstown

Alternates: William B. Challman, M.D., Mt. Vernon
John M. Paris, M.D., New Albany

To fill unexpired term of George W. Willison, M.D., Evansville, AMA alternate delegate, who resigned: (Term expiring December 31, 1964): Frank Green, M.D., Rushville

ADDRESS OF PRESIDENT-ELECT

Thank you all, thank you all very much. I have just a few remarks I'd like to make and I make them from my heart. With a great sense of humility I am most happy to receive this honor. I want to thank everyone in medicine for your confidence and for your cooperation in the past. I wish to thank my family and my wonderful hometown compatriots who are making this possible—a small town family doctor to be the president-elect of this state medical association. I feel that many facets of medicine today have only one common ground—that is in Indiana the Indiana State Medical Association. It has been said, and I would like to repeat, jobs worth doing, and friends worth having make life worth living. Thank you.

Places of 1965 and 1966 Annual Conventions

The chairman announced that the 1965 convention would be held in Indianapolis because the state association was planning on meeting jointly with the AMA Council on Industrial Health.

On behalf of the Third District and particularly the Orange County Medical Society, which would be the host society, Dr. Paris formally invited the association to meet in French Lick in October 1966, and **on motion duly made and seconded, the invitation was accepted.**

On motion of Drs. Paris and Stover the House referred to the Council the responsibility of selecting places for the 1967 and 1968 annual conventions.

Resolutions of Appreciation

Appreciation of President

Dr. Kenneth O. Neumann presented the following resolution, which was adopted unanimously:

WHEREAS, with each succeeding year greater demands are made upon the office of the presidency as the programs of the association grow; and

WHEREAS, this past year's president has devoted much time to his office and has given un-

stintingly of personal time to confer on all matters concerning the affairs of the association; and

WHEREAS, under his very able direction the association has advanced the purposes of organized medicine and has been well represented in activities pertaining to the health of Indiana's citizens; and

WHEREAS, through his genuine interest and sincere dedication to organized medicine he has established a framework of continued progress for the incoming officers, now

THEREFORE, BE IT RESOLVED that this House of Delegates extend its heartfelt thanks and appreciation to Dr. Maurice E. Glock for his outstanding service to the association.

Appreciation of All Who Contributed to Success of Convention

Dr. Neumann presented the following resolution which was adopted by consent:

WHEREAS, the 114th annual Convention has been a successful and outstanding meeting in all respects,

THEREFORE BE IT RESOLVED, that this House of Delegates acknowledge their appreciation to the Commission on Convention Arrangements; to the communications industry for their fine reporting of our meeting; to the Columbia Club for their cooperation; to the officers of the Murat Temple; to the technical and scientific exhibitors —all have contributed much to the success of this meeting; and further to Smith Kline and French Laboratories for making the colored television presentation possible; and

THEREFORE BE IT FURTHER RESOLVED that the secretary be instructed to transmit the appreciation of this association to the above.

Adjournment

The house adjourned, *sine die*, at 3:50 p. m., Thursday, October 17, 1963.

Association News

EXECUTIVE COMMITTEE

October 14, 1963

Present: Wendell E. Covalt, M.D., chairman; Ralph V. Everly, M.D.; Maurice E. Glock, M.D.; Don E. Wood, M.D.; Kenneth O. Neumann, M.D.; Irvin W. Wilkens, M.D.

Frank B. Ramsey, M.D., Robert Hollowell and Ralph Hamill, attorneys, and James A. Waggener, executive secretary.

Membership Report:

Number of members as of December 31, 1962	4,340
1963 members as of September 30, 1963:	
Full dues paying	3,756
Residents and interns	144
Council remitted	44
Senior	338
Honorary	3
Military	57
Total 1963 members as of September 30, 1963	4,342
Number of members as of September 30, 1962	4,312
Gain over last year	30

Number of AMA members as of September 30, 1963		4,238
Total 1962 AMA members as of September 30, 1962		4,188
Gain over last year		50
1963 AMA members:	Dues paying	3,750
	Exempt, but active	588
		4,338
Number who have paid state dues but not AMA dues as of September 30, 1963		104

Headquarters Office

The secretary asked the Executive Committee whether or not the association should endeavor to sponsor a trip to Hawaii following the AMA meeting in San Francisco in June, 1964. On motions of Drs. Wood and Everly the secretary was instructed to arrange such a trip to offer to the membership.

Treasurer's Office

The treasurer's report was accepted by consent.

Annual Convention, Indianapolis, October 15-17, 1963

The convention program outline and sale of exhibit space were approved by consent.

The arrangements for the annual dinner, the supplemental report to be presented to the House of Delegates by the Ad Hoc Committee on the transfer of professional services from Blue Cross to Blue Shield, as well as a letter from Dr. Blasingame concerning his inability to attend the annual convention, were read for the information of the committee.

Legislation

Dr. Wood discussed the legislative picture at the national and local levels and reviewed, for the information of the committee, the study of federal grants in research, the VA medical care program, the national debate program of the schools on the King-Anderson bill, the senior citizen activity on the King-Anderson bill, and the possibility of Supreme Court action on implementation of the Kerr-Mills bill in Indiana.

Organization Matters

The secretary read letters from Drs. Fred A. Hendricks, Jack W. Hickman and G. A. VonDerHaar concerning their resignations from the advisory committee of the Indiana Institute of Medical Assistants.

The secretary read a letter from the State Director of the Budget, together with a proposed reply, and this was approved by consent.

A letter from Dr. A. C. Offutt concerning an editorial appearing in the American Journal of Diseases of Children on the use of fluorides was read for the information of the committee.

A letter from the Medical and Chirurgical Faculty of the State of Maryland concerning a resolution on the Review of American Medical Association Policy Concerning the Use of Federal Grants was read and on motion of Dr. Wood, taken by consent, this matter is to be deferred until the meeting of the Executive Committee with the AMA delegates.

A letter from the Oregon State Medical Society announcing that the Oregon Society is placing the name of Dr. Raymond M. McKeown in nomination for president-elect of the American Medical Association at the 1964 meeting was read for the information of the committee.

A letter from Blue Cross and Blue Shield concerning proposed changes in their Articles of Incorporation was reviewed for the information of the committee.

The supplemental report of the Ad Hoc Committee on transfer of professional services from Blue Cross to Blue Shield was again reviewed, as was a letter addressed to the Ad Hoc Committee by the Indiana Hospital Association rejecting the proposal for the transfer of these services.

A letter from Dr. Philip T. White inquiring as to whether or not recognition would be available for the Indiana Society of Electroencephalographic Technicians was read, together with a letter of inquiry to the American Medical Association, and it was agreed that the State Medical Association should have official word from the AMA before replying to Dr. White's letter.

A letter of appreciation from the American Association of Medical Assistants, Inc., for cooperation of the Indiana State Medical Association with the Indiana chapter was read for the information of the committee.

New Business

The president's speech, to be given before the 114th annual convention, was reviewed by the

committee and was approved on motion of Drs. Wood and Everly.

A letter from Dr. Marvin Cuthbert concerning the desires of the association toward reactivating the Section on Ophthalmology and Otolaryngology and expressing a willingness to work for this purpose was read, and by consent the secretary was requested to notify Dr. Cuthbert that every effort should be made to maintain the section and that the Executive Committee would appreciate his working toward this end.

Future Meetings

An invitation from Wisconsin Physicians Service for a representative to attend a meeting in Madison, Wisconsin, November 19 and 20, 1963, was reviewed, and on motion of Dr. Glock it was suggested that this be called to the attention of the Indiana Blue Shield Plan in the hope that Blue Shield might defray the expenses of someone to this meeting.

It was decided that no representative would be sent to the American Medical Association National Congress on Medical Quackery at Washington, D. C., on November 25 and 26, 1963.

A letter addressed to Dr. E. S. Rifner concerning a planning meeting for the 17th National Rural Health Conference was read, and upon motion of Drs. Glock and Everly, Dr. Rifner was authorized to attend this meeting, to be held in Columbus, Ohio, November 5 and 6, 1963.

Invitation to the Second Annual Mid-America Nursing Home Convention in Chicago, November 24-26, 1963, was read. No representative is to be sent to this meeting.

The dates of the AMA Clinical Meeting in Portland, Oregon, were called to the attention of the committee.

Representation at the U. S. Chamber of Commerce Public Affairs Conference in Washington, D. C., January 29 and 30, 1964, is to be discussed later.

Invitation to send representatives to the National Health Forum in Pittsburgh, March 9-11, 1964, was turned down.

There being no further business the committee adjourned to meet again at the conclusion of the Council meeting following the final meeting of the House of Delegates.

EXECUTIVE COMMITTEE

October 17, 1963

The Executive Committee met in the Candidates Room of the Murat Temple on Thursday, October 17, 1963, at the conclusion of the Council meeting and upon secret ballot Dr. Ralph V. Everly was elected chairman of the Executive Committee for the coming year.

At this time the Committee also welcomed Dr. George Willison as a member of the Executive Committee, to replace Dr. Wendell Covalt, who resigned.

There being no further business the committee adjourned to meet again at 4:00 p. m., December 1, 1963, in Portland, Oregon.

If an interim meeting is necessary, it will be called by the chairman.

THE COUNCIL

Indianapolis
October 14, 1963

The Council convened at 12 noon, Eastern Standard Time, in Parlor "A" of the Columbia Club, Indianapolis, on October 14, 1963, with Dr. Kenneth O. Neumann, the chairman, presiding. Roll call showed the following present:

Councilors:

First District—P. J. V. Corcoran, Evansville
G. M. Wilhelmus, Evansville, alternate
Second District—E. T. Edwards, Vincennes
Philip T. Holland, Bloomington, alternate
Third District—John M. Paris, New Albany
Donald M. Kerr, Bedford, alternate
Fourth District—Joe M. Black, Seymour
Fifth District—A. W. Cavins, Terre Haute, alternate
Sixth District—Frank H. Green, Rushville, alternate
Seventh District—Albert M. Donato, Indianapolis
Eighth District—Gordon B. Wilder, Anderson
Donald R. Taylor, Muncie, councilor-elect
Ninth District—Kenneth O. Neumann, Lafayette
Tenth District—Lowell H. Steen, Whiting
Eleventh District—E. S. Rifner, Van Buren
Lowell Hillis, Logansport, alternate
Twelfth District—Milton F. Popp, Fort Wayne
William Clark, Fort Wayne, alternate
Thirteenth District—Jene R. Bennett, South Bend

Officers:

Maurice E. Glock, Fort Wayne, president
Don E. Wood, Indianapolis, president-elect
Irvin W. Wilkens, Indianapolis, treasurer

Journal:

Frank B. Ramsey, Indianapolis, editor

Executive Committee:

Wendell E. Covalt, Muncie, chairman
Ralph V. Everly, Indianapolis

Guests:

Harold C. Ochsner, Indianapolis, AMA delegate
Jack E. Shields, Brownstown, AMA delegate
Robert M. Brown, Marion, AMA alternate delegate
George W. Willison, Evansville, AMA alternate delegate
William B. Challman, Mount Vernon, AMA alternate delegate
John D. VanNuys, Indianapolis, dean, I. U. School of Medicine
Lester D. Bibler, Indianapolis, AMA Trustee, and chairman, Committee on Student Loan
Virgil C. McMahan, Vincennes, chairman, Commission on Convention Arrangements
Lester H. Hoyt, Indianapolis, vice-chairman, Professional Advisory Committee of Blue Cross
Philip B. Reed, Indianapolis, chairman, Grievance Committee

Staff:

Ralph Hamill, attorney
Howard Grindstaff, field secretary
J. A. Waggener, executive secretary

On motion of Dr. Edwards, seconded by several, minutes of the July 14, 1963, Council meeting were approved as printed in the September 1963, issue of The Journal.

Reports of Councilors

Dr. Cavins reported that Dr. Wiseman had been re-elected councilor of the Fifth District.

Dr. Wilder introduced Dr. Donald R. Taylor of Muncie, newly elected councilor of the Eighth District.

Dr. Neumann announced that the Ninth District Medical Society would have a meeting on Medicine, Religion and Welfare on November 12 and invited all members present to attend, if possible. Dr. Paul B. McCleave, director of the AMA Department of Medicine and Religion, will be the evening speaker.

Dr. Bennett reported that at the Thirteenth District Society meeting held in September, Dr. Edward G. Dovey, Elkhart, was elected to replace Dr. Robert H. Denham, South Bend, on the Blue Shield Board of Directors for the three-year term beginning March, 1964.

Matters Referred to Council by Executive Committee

1. *Better Business Bureau membership for 1964.* **On motion of Drs. Black and Bennett, the Council authorized the payment of a $150.00 membership in the Better Business Bureau for 1964.**

2. *Building Matters.*—Dr. Covalt reported that the inside office staff had painted the walls and installed the tile floor in the basement at a cost of $600.00 for material and a saving of about $2,000.00 in labor. **The motion of Dr. Popp that a letter be written to the staff thanking them for their interest and loyalty was taken by consent.**

The Council concurred in the recommendation of the Executive Committee that the Building Committee be authorized to proceed with the finishing of the basement and the installation of kitchen facilities as soon as funds become available.

Dr. Everly reported that through the personal efforts of Dr. Ottis N. Olvey, assistant treasurer, $6,830.00 had been received during the past year for the building fund.

Reports of Officers

DR. MAURICE E. GLOCK, president: I have very little to say. I want to say I'm glad to be here—that's the understatement of the year.

I would like to tell you about the recent Michigan State Medical Society meeting which I attended. It seemed like I was back in Indiana because their problems are the same, their discussions are the same, except for one major thing. They are having a tremendous problem up there with their Blue Shield plan. As you know, a year ago we had speakers down from Michigan extolling the fact

that their M-75 program was the best program in the country. But they have a service plan and they are broke. I couldn't help but think, as we sat through some very lengthy hearings in their attempt to resolve their problems, how lucky we are in Indiana that we have been conservative and that we've clung traditionally to the indemnity type of program. I sincerely hope that we never let any one of our paid executives change our traditional thoughts on this subject.

One thing done in Michigan which I believe we could copy very effectively is the assignment of two members of the Council to each reference committee, without power to vote. These councilors, who are versed in what is taking place in association affairs, sit in on reference committee meetings and the reference committee chairman calls on them for information and background. I think this would be of considerable help to the reference committees.

Thank you all for all of your kind help and your efforts during the past year, and for your courtesy in putting up with some of my more verbose moments. It's been a very happy year for me and I certainly have enjoyed working with everyone, and I thank you.

DR. DON E. WOOD, president-elect: I would like to tell you a little about my experience in England. There I met with the members of the House of Delegates and with the Board of Trustees of the British Medical Association and learned first hand how the man in practice really feels about their system of medical care.

The care of the patient has gone down. And so the House of Delegates of the British Medical Association and these men in practice ask that this particular thing be remedied by allowing them again to come back on the hospital staffs and admit their patients.

Dr. Wood reported on the recent meeting in Chicago of the AMA Council on Legislative Activities which he had attended and at which the following subjects were discussed:

a. Budget of the NIH organization. "This is a tremendous budget, some 2.6 billion dollars. Now this is under study by a committee of the various councils of the AMA in an effort to make some suggestions as to how monies can be saved, and I think this is one evidence where organized medicine is going to move forward in trying to be constructive."

b. King-Anderson legislation.

c. High school debate subject for 1964 which is "Medical Care for the Aged over 65 under the Social Security System." The AMA has sent out some 60 thousand debate kits to inform students and some 13 million pieces of literature in this particular area.

Dr. Wood asked that the councilors check their local libraries to be sure that reference material is available there for high school students. He recommended a book, written by Shoeck and published abroad, which contains information on the various systems of medical practice throughout the world.

d. American Medical Association color film entitled, "The Gift of Health," for program material. This film explains all the attitudes about the Social Security approach to the practice of medicine.

e. Speakers' bureau of the AMA.

f. Associated Press article on the Kerr-Mills bill.

g. TV skit on medical problems *not* in the field of legislation, but on what physicians are actually doing in the field of practice. This will be authenticated and will have a physician as a consultant.

Dr. Wood also discussed the resolution to be introduced in the House of Delegates concerning the efficacy of drugs and urged members to read the resolution very carefully and to support it.

DR. IRVIN W. WILKENS, treasurer: At this time we are still in the black and that is very good because a year ago it looked as though we might not be in the black. I have been approached by letter and personal contact of various members of the society about whether or not there will be an increase in dues. Personally, at this time, I see no need for an increase in dues. However, with rising costs, and things as they are going generally, possibly in the next three to five years we will have to look forward to an increase in our state dues. It has been suggested that right now seems to be a rather receptive time, members of the various county societies have been pretty much in favor of it on a yearly basis, rather than in a lump sum at the end of five years of let's say $25.00. I would like for you to give that some thought and have an expression of opinion as to what you think or what you think your county society may think of that particular thing. I see that it probably will be necessary in the years to come but as of now it is not necessary.

Also, I wonder whether you think we should push the Building Fund. If we could get 100% response—60% of the membership has contributed in one way or the other, either out and out donations, or loans—we would have $110,000.00 plus in our general fund which we do not have now. In other words we could wipe out all of our indebtedness if we could get a good response from the membership as a whole on this Building Fund.

Dr. Wilkens presented, with comments, the following annual audit of Wolf & Company, for the period October 1, 1962 to September 30, 1963:

The Council
Indiana State Medical Association
Indianapolis, Indiana

We have examined the balance sheet of INDIANA STATE MEDICAL ASSOCIATION as of September 30, 1963, and the related statements of fund surplus and revenues and expenditures for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of

the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and statements of fund surplus and revenues and expenditures present fairly the position of Indiana State Medical Association at September 30, 1963, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

WOLF AND COMPANY
Certified Public Accountants

Indianapolis, Indiana
October 5, 1963

INDIANA STATE MEDICAL ASSOCIATION

BALANCE SHEET

September 30, 1963

Exhibit A

ASSETS

General Fund:			
Cash		21,475.83	
Note receivable		271.48	
Inventory—tape recorders		269.94	
Deposits, postage and air travel		804.96	
Prepaid expenses		2,603.03	
Accrued interest receivable		569.61	
Due from other funds:			
Student loan fund	25,000.00		
The Journal	1,499.82	26,499.82	
Reimbursement due for Medicare expenses		1,236.15	
Investment in United States obligations at cost, plus amortization (Notes 1 and 3):			
Treasury bonds	54,948.18		
Savings bonds	10,000.00		
	64,948.18		
Amortization of premium and discount (net)	38.10	64,986.28	
Savings and loan shares (Note 2)		40,133.32	
Fixed assets:			
Office furniture and equipment	60,514.94		
Less accumulated depreciation	17,273.38	43,241.56	202,091.98
Building Fund:			
Cash		1,079.20	
Fixed assets:			
Building	295,799.02		
Less accumulated depreciation	8,782.41	287,016.61	
Land		69,187.60	357,283.41
The Journal:			
Cash		830.60	
Accounts receivable:			
Advertising	5,758.99		
Other	249.72	6,008.71	6,839.31
Medical Defense Fund:			
Cash		2,798.69	
Accrued interest receivable		244.28	
Due from general fund		837.50	
Investment in U. S. Government obligations at cost, less amortization:			
Treasury bonds	25,262.93		
Savings bond	1,000.00		
	26,262.93		
Less accumulated amortization	89.47	26,173.46	30,053.93
Student Loan Fund:			
Cash		1,924.77	
Notes receivable		39,383.17	41,307.94
Medicare Fund:			
Cash		36,780.05	
Recoverable payments to doctors		38,102.95	
Unbilled to doctors		117.00	75,000.00
			712,576.57

Notes:

1. General fund investments in United States obligations aggregating $2,000.00 have been allocated to the building fund.
2. Savings and loan shares, including interest in the total amount of $40,133.32, have been allocated for the purpose of liquidating the obligation to the American Medical Education Fund.
3. General fund investments in United States obligations in the principal amount of $20,000.00 are being held in escrow by the U. S. Government to secure funds advanced for the Medicare Fund.

LIABILITIES AND FUND SURPLUS

General Fund			
Liabilities:			
Accounts payable		1,713.05	
Accrued payroll taxes		296.10	
Payable to other funds:			
American Medical Education Fund	37,770.00		
Medical defense fund	837.50	38,607.50	
Deferred income:			
Exhibitors' deposits	17,160.00		
Unearned dues	29,392.69	46,552.69	
Deposits on tape recordings		404.50	
		87,573.84	
Fund surplus (Exhibit B)		114,518.14	202,091.98
Building Fund			
Liabilities:			
Loans from members		24,475.00	
Notes payable—bank		63,000.00	
Performance deposit in escrow		500.00	
		87,975.00	
Fund surplus (Exhibit B)		269,308.41	357,283.41
The Journal			
Accounts payable—trade		5,267.84	
Accrued payroll taxes		71.65	
Due to general fund		1,499.82	6,839.31
Medical Defense Fund			
Fund surplus (Exhibit B)		30,053.93	30,053.93
Student Loan Fund			
Due to general fund		25,000.00	
Fund surplus (Exhibit B)		16,307.94	41,307.94
Medicare Fund			
Funds advanced by U. S. Government (Note 3)		75,000.00	75,000.00
			712,576.57

STATEMENT OF FUND SURPLUS

For the Year Ended September 30, 1963

Exhibit B

General fund:			
Balance, September 30, 1962			150,002.94
Excess of revenues over expenditures (Exhibit C)		2,593.83	
Assets transferred from building fund		35,048.00	
Received from Medicare—prior period expense refund		1,126.97	38,748.80
			188,751.74
Less on bonds called and sold		506.51	
		31,402.91	
Proceeds of matured bonds transferred to building fund		60,000.00	
Deficit transferred from The Journal		13,727.09	74,233.60
Balance, September 30, 1963			114,518.14
Building fund:			
Balance, September 30, 1962			228,284.40
Revenues:			
Dues allocated		18,902.50	
Donations from members		6,835.00	
Special donations		94.00	
Proceeds of matured bonds transferred from general fund		60,000.00	
		85,831.50	
Less:			
Depreciation on building	5,870.20		
Interest on bank loan	3,889.29		
Assets transferred to general fund	35,048.00	44,807.49	41,024.01
Balance, September 30, 1963			269,308.41
The Journal:			
Balance (deficit), September 30, 1962			(9,259.16)
Excess of expenditures over revenues (Exhibit D)			4,467.93
			(13,727.09)
Deficit transferred to general fund			13,727.09
Balance, September 30, 1963			—0—
Medical defense fund:			
Balance, September 30, 1962			30,764.99
Excess of expenditures over revenues (Exhibit E)			711.06
Balance, September 30, 1963			30,053.93
Student loan fund:			
Balance, September 30, 1962			15,900.07
Interest earned		368.87	
Donation received		39.00	407.87
Balance, September 30, 1963			16,307.94

STATEMENT OF REVENUES AND EXPENDITURES

Exhibit C

For the Year Ended September 30, 1963

GENERAL FUND

	Actual	Budget	Actual Over (Under) Budget
Revenues:			
Dues	226,239.51	205,865.00	20,374.51
Less dues allocated:			
The Journal	30,165.00	31,096.00	(931.00)
Medical defense fund	4,737.75	4,611.25	126.50
Building fund	18,902.50	18,445.00	457.50
American medical education fund	37,760.00	36,890.00	870.00
	91,565.25	91,042.25	523.00
Dues available for operations	134,674.26	114,822.75	19,851.51
Interest on investments	2,972.71	2,400.00	572.71
Received from A.M.A.	1,640.45	1,000.00	640.45
Net income—annual meeting	1,752.20		1,752.20
Contribution — woman's auxiliary	1,250.00		1,250.00
Miscellaneous	15.50		15.50
Total revenues	142,305.12	118,222.75	24,082.37
Expenditures:			
Committees and commissions (Schedule C-1)	16,049.09	17,000.05	(951.46)
Officers and council (Schedule C-2)	17,763.34	21,390.00	(3,626.66)
Headquarters office (Schedule C-3)	97,605.11	97,038.00	567.11
Woman's auxiliary	1,000.00	1,000.00	
Donations	103.00	500.00	(397.00)
Employes' retirement fund	7,210.75	7,500.00	(289.25)
Total expenditures	139,731.29	144,428.55	(4,697.26)
Excess of revenues over expenditures (expenditures over revenues)	2,573.83	(26,205.80)	28,779.63

STATEMENT OF OPERATING EXPENDITURES

Schedule C-1

For the Year Ended September 30, 1963

COMMITTEES AND COMMISSIONS

	Actual	Budget	Actual Over (Under) Budget
Standing committees:			
Grievance	200.57	250.00	(49.43)
Student loan	62.65	100.00	(37.35)
Commissions:			
Constitution and by-laws	204.71	250.00	(45.29)
Interprofessional relations	218.56	50.00	168.56
Legislation	7,569.04	7,000.00	569.04
Public health	1,092.30	1,100.55	(8.25)
Public information	2,451.26	2,500.00	(48.74)
Special activities	516.68	500.00	16.68
Voluntary health agencies	778.60	750.00	28.60
Medical economics and insurance	900.48	1,000.00	(99.52)
Medical education and licensure	479.79	700.00	(220.21)
Building		100.00	(100.00)
Governmental medical services	743.39	1,200.00	(456.61)
Aging	831.06	1,500.00	(668.94)
Total	16,049.09	17,000.55	(951.46)

Schedule C-2

OFFICERS AND COUNCIL

	Actual	Budget	Actual Over (Under) Budget
President	1,354.25	1,500.00	(145.75)
President elect	226.98	500.00	(273.02)
Council chairman	266.35	300.00	(33.65)
A.M.A. delegates	7,629.63	11,440.00	(3,810.37)
A.M.A. meetings	3,214.91	2,500.00	714.91
Treasurer, auditing and accounting	1,300.00	1,500.00	(200.00)
Council travel	969.08	1,250.00	(280.92)
Council meetings	839.52	750.00	89.52
Better Business Bureau	150.00	150.00	
Chamber of Commerce	1,000.00	1,000.00	
Executive committee meetings	520.29	400.00	120.29
Executive committee travel	292.33	100.00	192.33
Total	17,763.34	21,390.00	(3,626.66)

Schedule C-3

HEADQUARTERS OFFICE

	Actual	Budget	Actual Over (Under) Budget
Salaries	59,048.09	61,700.00	(2,651.91)
Supplies	1,825.38	2,200.00	(374.63)
Telephone and telegraph	6,153.01	4,500.00	1,653.01
Postage	3,499.80	3,000.00	499.80
Printing and stationery	1,061.79	1,750.00	(688.21)
Travel and entertainment	7,367.33	10,000.00	(2,632.67)
Building operation and utilities	4,344.27	7,288.00	(2,943.73)
Organization memberships	509.50	450.00	59.50
Insurance:			
Hospitalization	983.48	1,100.00	(116.52)
Other	3,580.93	1,800.00	1,780.93
Extra help	57.25	500.00	(442.75)
Payroll taxes	1,798.21	1,750.00	48.21
Maintenance—office machines	646.96	500.00	146.96
Depreciation	6,453.54		6,453.54
Unallocated	275.57	500.00	(224.43)
Total	97,605.11	97,038.00	567.11

Exhibit D

STATEMENT OF REVENUES AND EXPENDITURES

For the Year Ended September 30, 1963

THE JOURNAL

	Actual	Budget	Actual Over (Under) Budget
Revenues:			
Subscriptions:			
Members	30,165.00	31,096.00	(931.00)
Nonmembers	996.00	712.00	284.00
Advertising	33,403.69	40,500.00	(7,096.31)
Other	5,566.83	5,500.00	66.83
Total revenues	70,131.52	77,808.00	(7,676.48)
Expenditures:			
Salaries (including extra help)	13,625.60	13,300.00	325.60
Office expense and postage	554.86	600.00	(45.14)
Printing and reprints	49,072.41	54,500.00	(5,427.59)
Engravings	3,602.84	3,400.00	202.84
Travel and meetings	1,500.00	1,550.00	(50.00)
Bulk mailing	1,136.34	1,100.00	36.34
Other publishing expense	550.50	600.00	(49.50)
Payroll taxes	527.83	500.00	27.83
Employe group insurance	150.48	140.00	10.48
Rent and electricity	3,408.03	3,840.00	(431.97)
Telephone and telegraph	405.11	400.00	5.11
Unallocated	65.45	150.00	(84.55)
Total expenditures	74,599.45	80,080.00	(5,480.55)
Excess of expenditures over revenues	4,467.93	2,272.00	2,195.93

Exhibit E

STATEMENT OF REVENUES AND EXPENDITURES

For the Year Ended September 30, 1963

MEDICAL DEFENSE FUND

Revenues:		
Transfer of applicable portion of dues	4,737.75	
Interest earned—U. S. Treasury bonds	1,067.05	
Amortization—U. S. Treasury bonds	64.11	
Profit on sale of bond	31.09	
Total revenues		5,900.00
Expenditures:		
Malpractice fees	3,821.06	
Legal fees	2,790.00	
Total expenditures		6,611.06
Excess of expenditures over revenues		711.06

Exhibit F

STUDENT LOAN FUND

Cash balance, September 30, 1962		636.69
Revenues:		
Collection of student loans	6,530.21	
Interest earned	368.87	
Contributions received from doctors	39.00	6,938.08
		7,574.77
Expenditures—loans to students		5,650.00
Cash balance, September 30, 1963		1,924.77

The matter of a dues increase was discussed by Drs. Paris, Holland and Kerr, and it was the consensus of the Council that this subject should not be pursued further at this time.

Dr. Wilder expressed the opinion that Dr. Wilkens in his report to the House of Delegates should urge contributions to the Building Fund from those members who have not yet contributed.

Drs. Shields and Rifner discussed the resolution which is to be presented to the House of Delegates concerning the realignment of dues structure.

DR. FRANK B. RAMSEY, editor of *The Journal:* The financial report for *The Journal* is in Exhibit D of the auditor's report. This year we missed hitting our budget by approximately $2,000.00. This was due to the fact that advertising income failed to reach our expected budgeted level by $7,000.00 and we are short only $2,000.00 due to the fact that our printing bill was $5,400.00 less than we had anticipated. Due to the fact that this is the year that we operated twelve months on nine months of the increase in subscription price, I would expect that next year our finances will be on an easier level.

DR. LESTER D. BIBLER, AMA trustee, extended greetings from the Board of Trustees of the AMA and invited members of the Council to attend the Portland meeting of the AMA. "The next meeting of the board of trustees will be the first week in November. At that time we will discuss the budget and review continued nominations

for the various committees of the AMA. The nominations which have been presented from Indiana will be considered at that time. Another thing which is coming up is possibly new liaison committees which we hope will be effective in assisting the image and activity of medical practice as a whole. I have the pleasure of participating as a member of the Communications and Legislative Committees. If the TV project, so ably reviewed by Dr. Wood, goes through, it certainly will be an interesting feature in support of medicine as a whole."

Reports of Guests

DR. JOHN D. VAN NUYS, dean, I. U. School of Medicine reported on:

(1) The meeting in September in the Governor's office with officers of the Association and the State Board of Medical Registration and Examination on problems which arose out of the discontinuance of reciprocity with 14 states which do not conform to Indiana examination standards, and on the decision of the State Board to deny temporary licenses.

(2) Need for expansion of medical education facilities in the state in order to graduate enough doctors to take care of Indiana's increasing population. Dr. Van Nuys endorsed the resolution to be presented to the House of Delegates by the Marion County Medical Society urging the Governor to appoint a study committee to study and report the future needs of medical education in the State of Indiana, saying this committee should have on it representatives of the medical profession, organized medicine, representatives from a number of the institutions of higher learning in the state and probably a number of persons from business and industry who have a stake in this matter.

In answer to a question Dr. Van Nuys said a new medical school, with hospital and laboratory facilities, would cost between 55 and 60 million dollars, without operation expense. Also, there has been 60 million dollars worth of reconstruction at the medical center since 1948.

(3) Shortage of applicants from rural communities. The university gets only a few applicants from the smaller cities where the biggest shortage of physicians exists, and the feeling is that students are not stimulated early enough in these smaller communities, especially in their high schools, as they are in the larger high schools.

DR. LESTER H. HOYT, vice-chairman of the Professional Advisory Committee of Blue Cross: I have here the minutes and detailed financial reports, so I can answer questions, if there are some.

You probably are interested in a further report on the resolution that was presented to the board in June, in which Blue Cross proposed to amend its charter to enable it to meet all of the necessary expenses of medical care. This was discussed some at that June meeting and the board was assured by Mr. Emswiller that this was no intent to invade the practice of medicine. The same thing was stated by Mr. Spring. The reason I mention this is because in our September meeting then, when the minutes were brought up for approval, these minutes were amended to add that the entire board concurred in the thinking presented by Mr. Emswiller and Mr. Spring.

Now at the September meeting there was an amendment to the Bylaws, the essence of which is that the Board of Directors shall refrain from issuing any certificates of membership or master certificates which would allow the member any benefits that were being furnished as of August 1, 1963 exclusively by Mutual Medical Insurance. This was passed unanimously.

THE CHAIRMAN: This in essence means that the status quo of the contractual relations offered by Blue Shield and Blue Cross will remain the same as they were prior to the change in the Articles of Incorporation.

DR. PHILIP B. REED, chairman of the Grievance Committee, discussed resolution No. 9, "The Responsibility of Medicine with Allied Health Professions and Services," which is to be introduced in the House of Delegates. "The gist of it is to really call attention of physicians to the fact that there are now eight persons in the health field to one physician—eight to one—taking care of health problems. Some physicians in this state are referring patients to clinical psychologists not for testing, for a fee, which I understand by the AMA and our own views, and certainly the APA, is ethical. They are referring these people for treatment, and contrary to this resolution and the official position of the AMA, they are allowing treatment to go forward without either their supervision or true collaboration. There are other professions that are getting referrals by physicians for treatment without the supervision of a physician or without collaboration with one. . . . Clinical psychologists outnumber psychiatrists in the United States now, and certainly we need the help of our colleagues in medicine, because, as I pointed out at the last Council meeting, the infringement for the most part into the field of treatment is not going to hurt the psychiatrist but the patient. These people are treating people who we think the general practitioner, the non-psychiatrist, should in many instances be treating. It is very important to note that most of the non-medical professionals who are pushing to establish themselves as psychotherapists wish to be in private practice. This is not where help is needed in this or in most states; the shortage exists in the public or tax supported programs.

We have cited as a footnote on the resolution Section 8 of the Indiana Medical Practice Act. We are very fortunate in Indiana in that we do have a Medical Practice Act that is worded in this way, because these people are actually in the practice of medicine as soon as they start treating people. . . . I have received much material recently

concerning pastoral counseling and it is not concerned with spiritual counseling. We know that medicine has respected and revered the minister as a spiritual counselor. He was in the field long before we were, certainly long before psychiatry, but they're not talking about spiritual counseling now; they're talking about doing dynamic therapy, and they spell it out. It would seem reasonable to expect any minister who conducts such treatment to accept medical supervision of his treatment or to at least work in true collaboration with a physician.

For the information of the Council, Dr. Reed also reported on two cases which have been referred to the Grievance Committee and which are being resolved by that committee.

Matters from Committees and Commissions

1. *Student Loan Committee.* Dr. Bibler, chairman, presented a financial report on the Student Loan Fund, calling attention to the item of $3,172.06 in past due accounts, which the committee is trying to collect. He also called attention to the committee's supplementary report which explained the Indiana National Bank plan to set up a guaranteed loan fund for medical students, whereby for every dollar the association puts in the fund the bank in turn will lend $12.50. This plan was discussed by Drs. Popp and Van Nuys.

2. *Council Ad Hoc Committee with Indiana Hospital Association.* Dr. Edwards, chairman, stated that he had submitted a report to all members of the Council bringing them up to date on the Ad Hoc Committee's activities. He asked the support of the Council in continuing the activities of the Ad Hoc Committee and appealed for continued "grass roots" approach. **On motion of Dr. Glock, duly seconded, the Council went on record as approving the work that the Ad Hoc Committee is doing and the Council is to recommend to the House of Delegates that this effort be continued.**

Economic and Organization Matters

1. *Remission of state dues.* **On motion of Dr. Donato, seconded by several, remission of the state dues of a member of the Marion County Medical Society, due to illness and retirement, was approved.**

2. *Nominations for two members of Editorial Board.* **On motions duly made and seconded, Drs. George M. Johnson, Richmond, and Irvin W. Wilkens, Indianapolis, were nominated to succeed themselves, the nominations were closed and the unanimous ballot of the Council was cast for Drs. Johnson and Wilkens.**

3. *Use of headquarters building by other groups.* Dr. Everly, chairman of the Building Committee, reported that his committee had been charged by the Council to establish rules and regulations governing the use of the headquarters building by para-medical groups but the report is not in final form as yet.

4. *Nominations of two Blue Shield Board members-at-large,* to replace two members whose terms will expire March, 1964, **were deferred until the January Council meeting, on motion of Drs. Paris and Edwards.**

5. *Election of Journal editors.* Dr. Ramsey, editor, reported that Dr. Stephen L. Johnson, Evansville, associate editor, would like to retire and he recommended Dr. Samuel R. Mercer of Fort Wayne to replace Dr. Johnson. **On motion of Drs. Popp and Corcoran, Dr. Mercer was elected associate editor for 1964 to succeed Dr. Johnson.**

On motion of Drs. Black and Cavins, the present editor, Dr. Frank B. Ramsey, Indianapolis, and Drs. Lall G. Montgomery, Muncie, David A. Bickel, South Bend, and A. W. Cavins, Terre Haute, present associate editors, were re-elected for 1964.

New Business

1. *The amendment to Article IV, Section 2, of the Constitution,* to be voted on during the convention was discussed by Drs. Rifner, Cavins, and Kerr, and Judge Hamill.

2. *Resolutions to be introduced* in the House of Delegates were read by title and discussed.

3. **On motion of Drs. Popp and Edwards the resolution to be introduced by Dr. Donato,** which had not been circulated to the delegates or the Council, urging "the Governor of the State of Indiana to take immediate steps to appoint a qualified Study Committee of representative citizens of our state to study and report the future needs of Medical Education in the State of Indiana" **was approved for introduction to the House of Delegates.**

4. Letter from the French Lick Hotel, stating that the 1964 dates originally set for the state medical convention at French Lick are still open, was brought to the attention of the Council by Dr. Paris and discussed by several. This is to be presented to the House of Delegates.

5. *Council representation at Reference Committee meetings.* The chairman assigned the councilors to sit in on the various reference committee meetings to assist in the deliberations of these committees.

There being no further business the Council was adjourned to meet again on Thursday, October 17, 1963, in the Candidates Room, Murat Temple, immediately following adjournment of the House of Delegates.

THE COUNCIL

Indianapolis
October 17, 1963

The Council met for its second meeting at the close of the final session of the House of Delegates on Thursday, October 17, 1963, in the Candidates Room at the Murat Temple, Indianapolis, with all councilors present.

Elections for 1963-64

1. *Chairman of Council.* By secret ballot, Dr. Kenneth O. Neumann, Lafayette, was elected chairman of the Council for 1963-64.

2. *Executive Committee.* **Upon motion of Drs. Paris and Popp, Dr. Ralph V. Everly, Indianapolis, was re-elected a member of the Executive Committee.**

Upon motion of Dr. Corcoran, seconded by many, Dr. George W. Willison of Evansville was elected a member of the Executive Committee to replace Dr. Wendell E. Covalt who had resigned.

Review Committee

Dr. Edwards moved that the Council put into effect Dr. Glock's suggestion of a Review Committee and that the Executive Committee appoint this committee. The motion was seconded by Dr. Corcoran and carried.

Date for January Meeting

The date of January 12, 1964, was selected for the next meeting of the Council.

There being no further business, the meeting was adjourned.

X64-2056

Indiana state medical association.
Journal.
v.56, 1963.

DATE	ISSUED TO

X64-2056

Indiana state medical association. Journal.
v.56, 1963.

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